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The SOUTHERN ECONOMIC JOURNAL

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A JOINT PUBLICATION OF THE SOUTHERN ECONOMIC ASSOCIATION
AND THE UNIVERSITY OF NORTH CAROLINA.

Published Quarterly at Chapel Hill, N. C.

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The SOUTHERN ECONOMIC JOURNAL

April, 1939

THE SOUTH FACES CHANGING DEMANDS*

HENRY A. WALLACE

U. S. Department of Agriculture

The beginning of wisdom in both the economic and political world is the willingness to cooperate with the inevitable. Many people, homesick for the world of yesteryear, try to turn back the clock. It cannot be done. Labor has never yet been able to sidetrack permanently a labor-saving invention. Capital has occasionally been able to do so, but even here the pressure for prompt utilization of the best we know has usually been too great.

We have not merely the problem of accommodating ourselves to a rapidly changing technology but also to a rapidly changing political world. When I speak of a changed political world, I mean first that the World War fundamentally changed the relationship of the United States to other nations; second, that the World War made all nations highly nationalistic and eager to become self-contained; third, that the common people over the entire world are demanding that the improved technology give them a higher standard of living, and fourth, that in most nations there is a strong centralization of power not only for purposes of military and economic warfare, but also for the purpose of giving the common people the highest possible degree of employment and standard of living compatible with vigorous plans for military and economic warfare.

It is my intention to discuss first the possible effect of the technological changes on the demand for a few of the leading products

* A paper read at the Economics Symposium held at Duke University, November 28, 1938.

of the South, and second, the effect of probable political changes on the demand for these products.

Technology seems to be both a threat and a promise to the South. Thus far, technology has contributed a signal service in the development of the cotton oil industry. However, in the development of synthetic fibers, like rayon, it seems for the most part to be a threat. Attractive fabrics utilizing cotton and rayon can increase the utilization of cotton; but eventually it may be possible to make synthetic fibers superior to cotton at a lower price than cotton can profitably be produced.

Today, we know that while rayon is not directly competitive with cotton, its production in the United States has increased from 52 million pounds in 1925 to over 300 million pounds in 1938. We know further that a tire company cooperating with one of the prominent chemical concerns is substituting a rayon product for cotton in automobile tires. The introduction of rayon cord for automobile tires has also brought about, through research, the production of superior cotton cords for automobile tires. If the rayon cords should prove to be definitely superior, the market for several hundred thousand bales of cotton might eventually be lost.

We know furthermore that Germany and Italy, which, previous to 1930 used to take an average of about 2,400,000 bales of cotton a year, during the past two years have taken an average of only 1,700,000 bales of cotton. These figures are for cotton from all sources, not merely American cotton. This cotton deficit has been more than offset by synthetic fibers. The success of Germany and Italy in making synthetic fibers and the development of other natural fibers has probably brought about a permanent reduction in the European demand for American cotton. There has been much debate as to whether the German and Italian fibers can be produced as cheaply as American cotton, but it would seem these debates are academic when applied to a totalitarian state with a surplus population. Such a state will always reach the conclusion that a synthetic product made at home is more to be desired than an imported product even though the cost of the imported product is somewhat less.

The most recent development in synthetic fibers is that of the

Du Pont Company which is setting up an extensive plant, supposedly costing at least \$7,000,000, at Seaford, Delaware. Asking the Chief of our Bureau of Chemistry and Soils for information about this product I received the following:

The new Du Pont synthetic fiber is the product of the late Dr. Wallace H. Carothers' brilliant work. The patent for the preparation of the material was issued September 20, 1938. This patent covers a fairly simple combination of dibasic carboxylic acids with basic substances known as diamines. The dibasic acids included range from carbonic acid with one carbon atom to the 18 carbon atom dibasic acid. In similar manner the diamines (from coal tar) listed in the patent, range from the 2 carbon ethylene-diamine to the corresponding 18 carbon diamine. The examples of dibasic carboxylic acids cited in the patent are adipic and sebacic.

If sebacic acid (10 carbon dibasic acid) is used this can be most readily obtained from castor oil through its constituent, ricinoleic acid. Most of the examples cite adipic (6 carbon dibasic acid) acid and the fact that the Du Pont Company call the fiber "66" indicates that they are evidently relying on adipic acid. Adipic acid can be made by the hydrogenation of phenol, a coal tar product, to cyclohexanol which in turn is oxidized to the desired acid. The selection of adipic acid by the Du Pont Company is further confirmed by the statement of an official of that company to the effect that this is "the first man-made organic textile fiber prepared wholly from raw materials from the mineral kingdom."

I hope no one goes into the business of castor bean growing as a result of this indication that a constituent of castor oil could be used in the production of this new synthetic fiber. Undoubtedly coal tar products are to be used extensively. My guess is that there is a considerable question as to whether castor oil will be used to any great extent or even at all. Perhaps no product of the American farm will be used in this new fiber. We shall all of us await fresh information with great eagerness.

Undoubtedly, the Du Pont fiber will have very little effect on the cotton market at any time during the next four or five years. If we may judge the future from the past, we would expect the greatest impact to come perhaps 15 or 20 years from now. At the start the chief use will probably be in competition with silk because apparently the new fiber has a unique combination of

high tensile strength, great flexibility and unusual elasticity. Because of its unique qualities it may for a time be sold at an even higher price than silk. As to what its ultimate production cost may be when experience is combined with large volume of output no one can say at this time. Some think that it will gradually cut off the use of cotton in the higher priced goods, leaving to cotton only the very low price field.

It would seem to be exceedingly desirable for the Land-Grant Colleges of the South, the Department of Agriculture and the Southern farmers to know the trend of such an invention as soon as possible. If the emphasis in the future is going to be increasingly on the use of cotton for low-priced goods, it may be necessary to breed a different type of cotton and put emphasis on low cost harvesting methods even though such methods mean lower grades. Such developments would tend to shift cotton production increasingly from the eastern part of the belt to the western. It is premature, of course, to say that such development will take place. I am mentioning the possibility because I feel all of us should face the future with wide-open eyes. We can't stop new inventions, but we must learn to cooperate with them to the utmost once the trend is clearly perceived.

Paper also continues to make serious inroads upon cotton in many ways, particularly as bags or containers. Here the problem is fundamentally one of lower costs and an improving production technique which is making paper better adapted than formerly for performing services in many fields of use. An additional factor which merits attention in considering the problem of competition between cotton and paper is that in many of its branches the paper industry is more highly organized and better able for that reason to put on an effective drive for new business.

Increased use of tractors especially in the western cotton belt, improved varieties, better methods of combating boll weevil, more efficient use of fertilizer, etc., have made it possible in years of ordinary weather to produce 100 bales of cotton today with at least 20 per cent less labor than was used 15 years ago. Improved methods have made it possible to produce in the ordinary year about 210 pounds of cotton per acre as compared with about 165 pounds 15 years ago.

Further improvements can be made and it is quite possible that 20 years hence the national yield of cotton per acre in years of ordinarily good weather will be 300 pounds per acre. To bring this to pass it will be essential to plant only the best land to cotton, and to encourage the universal planting of varieties which are even superior to those which we now have. It is quite possible that 20 years hence we shall be planting only 20,000,000 acres to cotton. And if the synthetic fibers continue to develop as rapidly as they have during the past 15 years we may be planting less than 15,000,000 acres to cotton, most of which would probably be planted west of Alabama.

Summing up, it appears that for the most part, technology developed wholly from the industrial side has been a threat to the peace of mind of the Southern people. Is it not pertinent to ask, why not put technology to work for agriculture rather than against it? That is the reason why so many agriculturists have been interested recently in developing a counter attack of their own. That is the reason we have in the 1938 Agricultural Act provision for a million dollar laboratory somewhere in the South to discover new uses for Southern farm products. If we can develop an additional research program of fundamentals and apply this in a newly developed technology, we may be able to keep cotton in the running in competition with synthetic fibers developed by chemists of the great industrial concerns. If we fail, we may have to find something else to do for the 10,000,000 people who have been getting their main livelihood out of growing cotton.

Tobacco, which next after cotton is the big cash crop of the South, is not faced with any technological threat. On the contrary, technology has helped the cigarette types of tobacco. The consumption of manufactured cigarettes has increased by leaps and bounds. Although a large part of this increase has been due to changes in consumer preferences, no doubt some of it has been due to lower manufacturers' costs resulting from technological changes. In the states of Virginia, North Carolina, South Carolina and Georgia, however, we have seen an extraordinarily good demand for tobacco at a time when the cotton producers in the same territory were in serious trouble much of

the time. Right now tobacco over most of this territory is above parity while cotton is about one-half of parity. Many cotton growers in the Piedmont section of these southeastern states would of course like to get into tobacco, but if they did it would not be long until tobacco prices fell to one-half of parity or perhaps even less. The cotton farmer cannot help himself by ruining the tobacco farmer.

The peanut, which grows to splendid advantage on certain of the sandy soil types in the southeast, will probably receive considerable benefit eventually from the technological discoveries. Dr. George Carver, the chemist at Tuskegee, has long contended that the peanut had in it extraordinary industrial possibilities. The protein in peanuts is more nearly complete than most plant proteins. Like the soybean, the peanut may perhaps be the beneficiary of technological discoveries. But no matter how great may be the contributions of technology to the peanut it seems unlikely that they will be of such a magnitude as to enable peanuts to furnish any very great alternative opportunity for cotton farmers.

Improved technology should have a beneficial effect on the forest industries of the South. There are about 200 million acres of forests in the South. Forest industries there have supported almost a million people. Trees grow rapidly in the South, but with adequate fire protection and proper cutting methods, present forest increment can be doubled. Forests and forest industry pay rolls in the South might then support nearly 2 million people.

It is reported that some of the South's pulp mills, and some of the 8,200 sawmills which were operating there in 1936, have started to use modern methods that approach sustained yield. If, however, these leaders return to the practice, still general in the South, of gutting the forests and exploiting labor, the result must be disastrous. For thoughtless forest exploitation leaves its ghost towns just as surely as coal mine exploitation. Northern capital, together with certain of its Southern satellites, may make money out of such exploitation, but large areas are left desolate and forlorn. Here would seem to be a field for suitable cooperation between the central government and the states, through regulation if necessary, to protect the long-time interests of the South.

I do not have the time to indicate many details of the way in which technology will inevitably help the South through the establishment of new industries. Slowly but surely the South will be given a better freight rate structure relative to the rest of the country. Inevitably, many types of industry will expand faster in the South than in the North, partly because of milder winters, partly because of greater natural resources, partly because living costs are lower and partly because here is a large population which formerly was able to get a living out of agriculture but which can no longer do so to the same extent because of changed conditions.

The textile mills which have so rapidly developed in the Piedmont region since the Civil War, and especially since 1921, are merely a forerunner of other developments to come over a large part of the Southeast. These developments can come only as fast as the young people of the South are trained to use their hands in a different way. Many of the Southern factories will not in any way be competitive with the Northern factories, but those which are competitive will ordinarily be more up-to-date and will have the advantage not merely of the milder winters and cheaper living conditions of the South, but also the greater efficiency of modern machinery.

As Southern industrial development progresses, there will always be the question of the extent to which the benefits are flowing to the Northern capital and a rather small number of trusted Southern lieutenants. As we consider the alternatives, however, I am inclined to think the South should welcome Northern capital because in most factories it is possible for a farmer's son or daughter to earn several times as much as can be earned growing cotton. If Northern capital gets too large a share out of industrial exploitation of the South, the injustice may be remedied perhaps by using a part of the federal income tax money for federal aid to education in those states which have an income per capita below a certain level. Perhaps there can be other federal and state safeguards which while permitting capital to flow will protect to some extent the resources and labor of the South.

Concluding this brief analysis of technology in relation to the South, it would seem that there will be a steady but not a rapid

drift away from one-crop farming, and especially away from cotton. So far as technology can influence the outcome, more people will be working in factories and fewer on cotton farms. More people in industry, including forest industries, will mean somewhat more market garden farms and eventually perhaps more poultry, more dairying, and more livestock.

The political forces growing out of the World War are working in much the same direction as the technological forces. In 1934 I wrote a pamphlet entitled "America Must Choose", indicating that when the United States was suddenly shifted by the World War from a debtor to a creditor nation, certain choices became necessary. Previous to the World War we paid foreign nations annually about 250 million dollars in interest charges and dividends as well as sending about 350 million dollars additional of American money each year to foreigners by our tourists, through immigrant remittances and freight payments on goods shipped in foreign vessels. The dollars which foreigners obtained in these various ways gave them a comfortable method of buying our surplus farm products before the war.

After the war the foreign nations continued to purchase our surplus farm products in volume chiefly because we were willing to loan. During the last half of the '20's the foreigners sent us over 500 million dollars a year in interest and dividend payments and our banking houses loaned the money back to them. In this way they were able to buy considerable quantities of our farm products at prices which were not completely disastrous.

In "America Must Choose" I suggested we had the choice before us of continuing to be a high-tariff nation and cutting down very radically on the production of farm products which we used to send abroad or reducing our tariffs very radically; or reducing our tariffs moderately and cutting down moderately on the production of the stuff we used to sell to foreign nations.

Of course there are a thousand middle-course choices all the way from extreme isolation on one side to extreme free-trade liberalism on the other. Undoubtedly our choice as we continually make it from week to week and year to year is not an absolutely fixed one although as time goes by our opportunities for choice become somewhat less. For a time I thought world events were going to

permit us to make a true middle-course choice. That was before September 27 of 1938.

The totalitarian states work so largely through sudden application of embargoes, exchange controls and bi-lateral agreements which are at variance with the most favored nation policy of non-discrimination followed by the United States that the 1938 enlargement of their sphere of influence pushes us off center a little toward the isolation side. Moreover, the totalitarian states because of their control of the press and the radio are able to discipline their people to get along without foreign imports and to accept inferior homemade substitutes as a joyful patriotic duty.

Going along with this we find a profound determination on the part of many countries either to grow their own cotton or to make substitutes at home or to buy cotton from someone else than the United States. A creditor nation which, like the United States, holds on to high tariffs is certain to force many of its customers into the kinds of devices I have just mentioned. If we had had no cotton control or no cotton loans during the period from 1933 to 1938, there would still have been a very marked expansion in cotton acreage in China, Russia and Brazil. The rather small acreage increases in India and Egypt may have been influenced to some extent by our American cotton policy but the really significant increases in China, Russia and Brazil have been due for the most part to forces not connected in any way with the American policy.

Because of the fact that the United States now has over half the gold in the world, because her tariffs are still high in spite of reductions made in trade agreements, and because she is determined not to loan any large volume of money to the outside world, it is to be expected that foreign nations will find it increasingly difficult to obtain the dollars with which to buy our cotton. The only door we have left open through which foreign nations may come to buy our cotton is the trade agreements door. This is a rather small door because the American people are afraid to let it be a big door. Because it is a small door the foreign nations are able to obtain only a rather small number of dollars with which to buy our cotton and other products.

In 1938, the foreign nations will buy about three billion dollars

worth of goods from the United States as compared with about five billion dollars annually in the late '20's. In the late '20's we, in effect, financed a vigorous export trade by heavy loans to citizens and corporations in foreign nations while at the same time we, in a sense, financed an almost equally heavy import trade by heavy loans to people and corporations inside the United States. Today we know of very few nations outside of this hemisphere where we would care to loan any great sum of money. Neither would we care to loan as recklessly to our own people inside the United States as we did during the last part of the decade of the '20's.

Without changing in the slightest our theoretical ideas about the long time desirability of collective security and freer trade between the nations, it seems to me that now more than ever before we are under the practical necessity of facing the post World War facts for what they are. An excessive nationalism is rampant over the entire world. It is right that with our trade agreements and in other ways we should use our influence against the economic manifestations of these nationalisms. It is unfortunate that we have not been able to put more pressure on our trade agreements program rather than less. When I consider the psychology of the people in the United States and in other lands it seems to me that a most extraordinary job has been done by our trade agreement negotiators against almost impossible obstacles. But extraordinary as these efforts have been, the results have not been enough to obviate continued programs of acreage adjustment.

Including the trade agreement recently concluded with Great Britain, we may have opened up a market by reason of all our trade agreements for the product of ten million acres, more or less, of agricultural land than would have been the case if there had been no trade agreements. There is no precise way of making an estimate of this sort but we do know that we have obtained outlets which otherwise would not have existed for American wheat, pork products, and fruit. Of perhaps equal importance is the fact that we have assured ourselves against a still further contraction in our markets in the United Kingdom and in other countries with which trade negotiations have been concluded by reason of agreement by these countries not to increase restrictions against American goods.

Incidentally, we must not overlook our neighbor to the north. The 1936 trade agreement with Canada reduced substantially the Canadian restrictions on imports of a large number of vegetables which are of particular importance in the South. It is expected that the new trade agreement will still further improve the opportunity for selling Southern vegetables in Canada.

It is also important for farmers to remember that the increased foreign markets for our industrial products obtained by the trade agreements gives an increased domestic market for farm products including tobacco and cotton.

So far as cotton is concerned, the trade agreements program does not obtain tangible results in the way of duty reductions. This is because in nearly all countries cotton is on the free list. By getting other countries to agree to continue it on the free list we help cotton a little, particularly in places where there may be a tendency to give preferential treatment to colonial cotton. But in general, benefit to cotton from the trade agreements program must come through an increase in imports into the United States because in that way foreigners can get the dollars with which to purchase those things which we have to sell and, as an essential raw material for industry, cotton is perhaps more desired by foreigners than any other American product.

But even if our tariffs were very low and imports into the United States were substantially increased, it seems doubtful that the income of the cotton farmers could be increased by much more than 100 million dollars as a result of larger imports into the United States. A freer trade would help but certainly would not solve the cotton problem.

There are two possibilities which might lead to a renewal of demand for cotton in a big way. One has to do with the possibility for greatly increased consumption inside the United States resulting from a great increase in business activity. The other has to do with the possibility of a greatly increased foreign demand resulting from an assurance of military and economic peace.

With regard to unusual business activity in the United States stimulating a much larger volume of domestic consumption, we may point out that the 1933-1937 recovery lifted domestic consumption to a record volume of 7.8 million bales in 1936-37 compared with a previous record of 6.9 in 1926-27. With business

activity about 25 per cent lower during the past cotton season than during the preceding one, cotton consumption fell to 5.6 million bales. Thus, the short-time prospect is that domestic consumption will be somewhere between six and seven million bales unless important new outlets are developed.

Over the past 25 years, domestic consumption has fluctuated around 30 pounds per capita. In view of the slower rate of population growth in prospect, this long time tendency suggests a domestic market for about seven million bales on the average during the next few years, with perhaps as such as eight million bales in the next year of real prosperity.

It might also be pointed out that since 1930 there has been a deficiency flow of capital (including business, governmental and private) amounting to at least two billion dollars a year which has kept us from attaining a full measure of recovery. In the decade of the 20's capital committed so many indiscretions that it has been scared throughout the 30's. If the foreign situation becomes only half way favorable, it is to be expected that in the normal course of events capital will again begin to flow in volume in the not distant future. It is even conceivable, beginning sometime two or three years hence, that it might commit many of the same indiscretions that it did in the 20's.

Turning now to the possibility of an unusual increase in foreign demand, it must be pointed out that this necessarily rests, first, on a confident belief by nations everywhere in widespread military and economic peace, and second, on whether the inroads of synthetic fibers and foreign growths on the demand for American cotton can be checked.

During the past eight years nations using the methods of military and economic warfare have dominated international relations. This, of course, has scared investment capital over the entire world. Moreover, investment capital especially in the United States during the decade of the '20's, had committed such serious indiscretions that it had to rest up for a considerable period of time before being willing to flow again. If, by some miracle there should develop an assurance of peace as great as that which existed from 1875 to 1910, and if, as a result capital began to flow freely on an international scale in the development of the potentialities

of backward people, I would not be surprised to see the United States within a few years exporting 50 per cent more cotton than it did in the 1937-38 season.

In some nations the people are consuming only one-third as much cotton per capita as we in the United States. If, by a flow of capital to the backward regions, these people can be enabled to increase their productivity and therefore their purchasing power, they may eventually buy twice as much cotton as they have bought in the recent past. Such a greatly enlarged cotton trade would depend not merely on genuine military and economic peace over the entire world but also on the assumption that the various synthetic fibers would prove to be rather disappointing.

Were such an expansion in foreign cotton consumption to take place, there is no certainty that our exports would exceed the average of the predepression years. World consumption of cotton has been increasing but about half of the increase has been in those countries that are producing their own cotton. Between 1926 and 1936 foreign consumption of foreign cotton increased about eight million bales, but foreign consumption of American cotton was reduced by about 3.5 million bales.

It is very significant that about half of the increase in foreign consumption has gone hand in hand with increased consumption, with little regard to the situation in American cotton. In each of these four countries—Russia, China, Japan and India—consumption increased about a million bales in the ten-year period 1926-1936, but in Russia the increased consumption was of Russian cotton, in India the increased consumption was of Indian cotton, and in China and Japan the increased consumption was largely of cotton produced in China and India. Only part of the four million bale increase in foreign consumption outside these countries may be considered subject to price competition were we to remove the present cotton loan and adopt an unrestricted volume and low price policy.

While I am a confirmed optimist by nature, I cannot see any immediate likelihood of the establishment of a firm belief in world peace, or checking foreign cotton expansion, or turning back the march of foreign technological progress. The four-power pact means an increased fear of war over the entire world rather than

a lessened fear. The larger sphere of German influence means a greater use of bilateral trading with bartering devices of one sort and another.

Because of the fact that the United States is a creditor nation proceeding in her trade agreements by means of the non-discriminatory most-favored-nation approach it would seem that the recent totalitarian diplomatic victories with their inevitable repercussions all over Europe, will tend to make it somewhat more difficult for the United States to increase cotton exports. The tendency for the debtor nations in the totalitarian sphere of influence will be to bargain on a barter basis with those nations who are also in a debtor position and in rather difficult circumstances for one reason or another. Our trade agreement program, which is directed toward the most noble objectives, and which considering the difficulties has to its credit most incredible accomplishments, cannot, in my opinion, make at any time in the near future any very substantial contribution toward a solution of the cotton problem.

When I say this I do not mean to advocate in any way a lessening of our trade agreement efforts, but I do suggest that we not allow our real and warranted enthusiasm for trade agreements to blind us to the possible effect which the Munich pact may have on the trade of the world, including the demand for American cotton. It is just as important for the farmers and Land-Grant Colleges of the South to study the significance of the trading methods of the totalitarian states as it is to study the on-coming impact of synthetic fiber inventions.

Producers of raw materials as they consider the future demand for their products, should give profound consideration to the way in which common people over the entire world are demanding that improved technology give them a higher standard of living. Is it possible in some way to use this feeling to bring about an increased market for raw materials? Poor people look at the nine million bales of government cotton on most of which the government has loaned 8 or 9 cents a pound, and wonder why a part of this cotton cannot be put to work serving human beings.

If we have learned to be so tremendously efficient in our methods of production, why don't these methods show up in an increased

standard of living? In the long run the people of the world will not tolerate such extraordinary scarcity in the midst of such unusual abundance. A way out must be found and in the long run will be found. Just what the way will be for cotton I hesitate to say at this moment. Several weeks ago I appointed a committee under the chairmanship of Assistant Secretary of Agriculture Brown to study this very problem.

A week ago today the committee had a meeting with some of the people in the cotton trade to see if they could suggest some method which would not disrupt the established channels of cotton trading but which would make available to people who are consuming only half as much cotton as they should, some of this surplus at a price which is not beyond their reach. I do not know yet for certain that a practical two-price domestic system to stimulate the consumption of cotton by the poorer people of the United States can be discovered, but I do know we have to make some kind of effort to increase cotton consumption and I am hopeful that American ingenuity will find a way of putting our abundance to work in terms of human welfare. We must not allow ourselves to repeat the tragedy of 1932, of going hungry and ragged in the midst of abundance. As long as there are millions of people unemployed in the cities and the Europeans and Asiatics are upset by the devices of the totalitarian states, we in the United States must do all we can, especially in those years when we have unusually good weather, to work out methods in cooperation with the distributing trades, the railroads, the laboring men and the farmers, to put our huge agricultural surpluses to work in terms of human benefit here inside the United States.

It would be far more desirable, of course, if all of our people were fully employed and if there were a normal demand so that we didn't have to scratch our heads to devise new and unusual methods. But we do have to accept for long years into the future many of the facts of this post-war world. A democratic capitalistic nation living in the same world with powerful totalitarian states does have to face from time to time the problem of unemployment and shrinking foreign demand. In conformity with the genius of our democratic institutions it is vital that we discover effective methods of taking care of our poor people and enabling them to enjoy an abundance which can no longer be consumed by foreign nations.

We have been doing a lot of thinking about this problem is the Department of Agriculture. Through the Federal Surplus Commodities Corporation we purchased last year two billion pounds of food products for distribution through the state relief agencies to the people on state relief. Typically, we have purchased these products only when they fell to a price less than three-fourths of parity, and in most cases the price was less than 60 per cent of parity. Among the products which we have purchased in the South in the year ending June, 1938 are the following kinds and quantities:

Apples.....	1,015,000 bushels
Cheese.....	1,210,000 pounds
Cotton seed oil.....	9,780,000 pounds
Egg (shell).....	35,300 cases
Fish.....	809,000 pounds
Fresh vegetables (snap beans, beets, cabbage, celery and tomatoes).....	67,000,000 pounds
Dry skim milk.....	612,000 pounds
Grapefruit juice.....	498,000 cases
Oranges.....	825,000 boxes
Canned peas.....	160,000 cases
White and sweet potatoes.....	867,000 bushels
Rice.....	69,990,000 pounds
Cane syrup.....	234,000 gallons
White and whole wheat flour.....	496,000 barrels
Total approximate cost...	\$7,839,000

If it is going to be necessary to continue to help our poorer people to be more effective consumers, we must work out a definite philosophy of some kind which will maintain the maximum of vitality in our private distributive system and the maximum of initiative on the part of our poorer people who have not been able to get placed satisfactorily in our capitalistic civilization. We cannot let people go hungry in the midst of plenty, but neither can we permit them to get into the habit of thinking that the government owes them a living. I am confident that we can find an answer here if we work hard enough at it.

Because extraordinary technology and a changed outside world may continue to have such an unusual effect on the demand for cotton, it is right that we give at least some consideration to the problem of the human beings who are so seriously affected. I am thinking especially of tenants and share-croppers who are growing from five to 30 acres of cotton on washing land which in the ordinary year will not produce over 200 pounds per acre unless it is heavily fertilized. Most of these people have an income of less than \$500 a year. Thousands of them in 1932 had no income.

In recent years the government—through the Rural Resettlement and Farm Security Administration—has loaned at one time or another to 600,000 of these underprivileged farm families, which otherwise would be on relief, an average of about \$350. Their farm plans have been supervised and the majority of them are getting ahead in the world for the first time. They have been taught to raise and can garden stuff and most of them have a few chickens and a cow. They will never be rich and most of them will probably continue to have an income per family of less than \$500.

The fundamental difficulty is that there are about twice as many farm people in the South today as at the close of the War between the States and the soil in the southeastern states is only about half as rich. The situation would be desperate indeed if there had not been developed new varieties, improved fertilizers and new methods of cultivation. These technical factors have offset in a very considerable measure the increased number of small farms and the poorer soil.

During the past five or six years partly as the result of the Triple A program and partly as the result of the Farm Security Administration program, the soil has been definitely enriched in many areas by the increased use of lespedeza, cowpeas, Austrian peas, alfalfa, etc. Both the Triple A and the Farm Security Administration are encouraging in a positive way the increased use of gardens. Hundreds of thousands of human beings have been helped in a most extraordinary manner. And yet for long years to come the South will continue to be the nation's No. 1 economic problem, simply because the great farm population in the South means that the cropland per worker must necessarily be small.

With a small number of crop acres per worker, the return per hour of labor with cotton at 10 cents a pound is probably not more than 10 cents an hour. On many farms in North Carolina in the year 1938 the return was much less than this. After the Triple A, the Farm Security Administration, the trade agreement folks, the Farm Credit Administration, and crop loans people have done all they can, it will be found that we are still faced in the South with a fundamental problem of more farm people than the land can support properly.

With the cotton outlook as it seems to be at the present time, we need the help not only of the agencies and programs which I have mentioned, but also a free opportunity for the younger farm people who are raised on cotton farms, to get jobs working in expanding industries in either the North or the South. This is an educational problem of the first magnitude in which not merely the South should be interested but the whole nation. A considerable percentage of the young people of the South must be trained so that they can produce more and earn more than is possible by working on a small patch of cotton.

The wage problem in the South and in the nation as a whole will never be settled right until a much larger number of the children of cotton farmers have an opportunity to enter productive industry. The farm problem of the South will never be settled right until a much higher percentage of the cotton farmers are growing larger acreages of diversified crops on richer land. It is impossible for a farm program by itself to bring this to pass. This is a job which will require the assistance of the best resources of the whole nation. The people of the South are a proud people. They want neither subsidy nor charity. But they do want an opportunity. President Roosevelt is determined to do all he can to bring it to them. It is going to take the sturdy, patient cooperation of government, business, labor, and agriculture over a long period of time to attain the objectives which the President had in mind.

We cannot attain these objectives if we dodge the facts of the changing demand for Southern farm products and especially for cotton. Let's keep abreast of the times. Let's launch the new million dollar laboratory in the South full of hope that eventually

we may find new uses for Southern farm products. Let's continue to use the Farm Security Administration, Triple A, the Soil Conservation Service, and the other governmental agencies to the best of our ability. But above everything, let's look the rock-bottom facts square in the face day after day with the utmost courage and determination.

CHANGING TRENDS IN COTTON PRODUCTION AND CONSUMPTION

LOUIS H. BEAN

Agricultural Adjustment Administration

This paper deals with certain long-time trends in cotton production and consumption in the United States and abroad purely from the statistical standpoint. A great deal has been said in the past three years about the effect of the cotton policies of the United States and the foreign markets for American cotton, and most of what has been said has turned on the very limited facts of the past four years. One of the commonest devices has been to contrast the restricted production of 1933-1936 with the expanding production abroad and with the reduced exports and foreign consumption. And one of the obvious conclusions derived from these simple short-range facts is that by adopting an unrestricted and therefore comparatively large production, the low prices resulting would check foreign expansion and stimulate our exports.¹

The data presented here call for a reconsideration of that simple conclusion. The economic and political forces at work in the world in shaping the course of foreign cotton production and trade are much too complex to justify the acceptance of that conclusion without a careful and searching examination. This paper is not to be taken as praising or criticizing the cotton programs, or criticizing the opponents of those programs. It argues neither for nor against loan programs, unrestricted production, export subsidies or other course of action. Nor does it argue for a high price policy with huge stocks held by the federal government as opposed to a low price policy and moderate or no holdings. Furthermore, it is not intended to leave the impression that the price of American cotton has not influenced and will not influence production and

¹ This article was prepared at the beginning of 1938 and does not deal with the striking developments in cotton supplies, consumption, exports and prices in 1938 and 1939. These will be dealt with in a subsequent article.

price abroad. Under ordinary competitive conditions, or rather the competitive conditions we would like to see, the price of American cotton probably would be the basic factor in the world cotton situation. But with conditions as they are, it would be well for all of us to disassociate ourselves as such as possible from emotion and to try to deal with realities. My chief concern is that cotton shippers, cotton merchants, cotton processors and others whose interests are tied to cotton in the United States make certain to examine some of the long-time aspects and more of the current forces that are at work over the world—trends and forces that may outweigh the supposed competitive power of large volume and low prices.

I

The first set of facts deals with the long-time trends in the production of cotton in the United States and in foreign countries. The United States has been producing cotton for over 150 years, and, in contrast with the cotton producing areas that have sprung up over the world during the past 50 years and particularly since the World War, we are an old producer. Have we in the past been able to check foreign expansion by producing large crops at comparatively low prices?

In the early 1800's, expansion of our cotton production was very rapid, but as the country grew the rate of increase tended to diminish. (This diminishing rate of increase is shown in Chart I.) From 1865 to 1875 the trend of cotton production rose about 100 per cent, from 1875 to 1885 about 60 per cent, from 1885 to 1895 about 40 per cent, from 1895 to 1905 about 30 per cent, and from 1905 to 1915 about 20 per cent. It is interesting to observe that this 50-year long-time tendency from 1865 to 1915 projected to 1937 indicates a maximum crop of about 19 million bales. The 1937 crop of nearly 19 million bales that was actually produced resulted from a reduced acreage and an extraordinarily high yield due in large degree to favorable weather but also to some extent to the effect of the AAA programs on soil and efficiency.

The trend of total foreign production during this long period has been somewhat different from that of United States production. The rate of foreign expansion from 1870 to 1915 was practically uniform each decade, the rise each decade being about 44 per cent,

without apparent diminution. It has been kept at a high and fairly uniform rate by the fact that new cotton producing territories have constantly been developed. In most cases, these newer countries like China, and Russia in the 1880's and Uganda, Anglo-

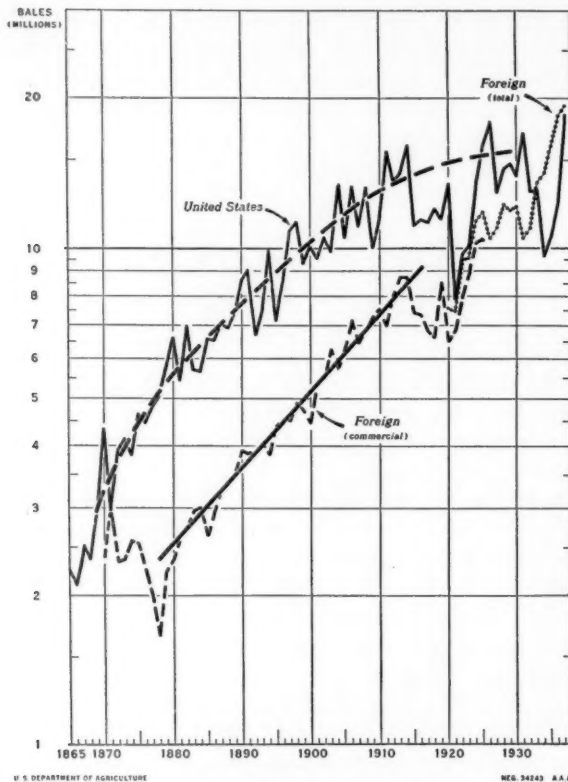


CHART I. COTTON PRODUCTION IN THE UNITED STATES AND FOREIGN COUNTRIES

Egyptian Sudan and Argentina in the 1920's, showed as rapid rates of growth as did the South in the early years of the 1800's.

The course of foreign production after 1915 shows a marked decline until 1920 and a marked recovery up to 1925. This, of

course, was due to the World War and is similar to the course of foreign production of other farm products such as wheat and livestock. By 1925 there was a general restoration of foreign farm production to approximately the volume called for by the prewar trends. Incidentally, it may be observed that it was not only the high prices of American cotton due to boll-weevil damage that brought expansion in foreign cotton production after 1920. In large measure, those stimulating high prices were due also to the wartime contraction of foreign production.

With respect to foreign production, too, we may raise the question as to what volume of foreign production might one have expected by 1937, if the 50-year prewar trend were projected. That trend indicates a crop in 1937 of about 19 million bales and this is actually what the Department of Agriculture reports the total of foreign production for that year to have been. In other words, judging from merely the prewar rates of expansion, foreign production could have been expected to expand so as approximately to equal the United States crop by 1937 and it did.

There is another significant fact that may be gleaned from this historical material which throws light on recent changes and on the question as to the validity of the argument that it was primarily the AAA programs that stimulated foreign production to its high level. Foreign production has usually expanded after industrial depressions. Thus, in the five years after 1878 foreign production increased about 90 per cent; in the five years after 1885 about 50 per cent; and in the five years after 1920 about 60 per cent. The increase in the five years after 1932 of about 75 per cent is not materially out of line with those earlier recoveries.

The final observation that may be made on the basis of this long record is that large crops in the United States have had very little effect in checking foreign acreage expansion. Since 1870 we have had 19 record crops, each larger than the one before it, and in all but four of these instances, total foreign cotton acreage instead of being reduced actually increased after each of our record crops. In other words, the experience of the South has been that the effect of a large volume of American cotton at comparatively low prices has usually been more than offset by many other factors making for foreign expansion.

Apparently foreign production especially in the newer countries has responded more to other factors than volume and low price competition from American cotton. It is significant in this connection to observe our recent experience with record crops. Following our record crop of 1926, most of which was sold to the world for less than cost of production, no reduction in total acreage took place, the reduction in some countries being offset by increases in others. Likewise after the record crop of 1931, which hardly returned out-of-pocket costs, a reduction in total foreign acreage of only 2 per cent took place. Most of this reduction occurred in the older countries of India and Egypt, partly because of the low price of American cotton and partly because of other reasons.

II

It is important to observe the areas of long-time and short-time foreign cotton expansion. At the bottom of the world-wide depression in 1932 total foreign acreage in cotton was 42.6 million. In 1937 it was 58.3, an increase of nearly 16 million acres or about 37 per cent. About two-thirds of this five-year increase occurred in India, China and Brazil; but part of this recent increase, as we have already seen, was a normal reaction from depression conditions and represents a return to predepression acreages in cotton. If we compare 1937 acreage with that of say 1925 or 1929, we may see more clearly where the long-time shifts are really taking place. Thus, since 1925 the total foreign cotton acreage expanded from 43 million to 58, an increase of about 15 million acres or nearly 35 per cent; but most of this long-time expansion is concentrated in the four countries, China, Brazil, Russia and Uganda. In this 12-year interval in these four countries, China expanded four million acres, Brazil at least five million, Russia nearly four, and Uganda more than one million, a total for these four countries of 14 million or more than 90 per cent of the entire foreign expansion. In the smaller cotton producing countries, there have been some increases, and some decreases over this 12-year period, with a net increase of about one million acres. These four countries are the ones with which the South is particularly concerned. Russian cotton and a good part of Chinese cotton have so far not been competitive with American cotton. And while the Russian domestic market particularly has been absorbing all of its expanded production, there

is no certainty that in the near future both of these countries may not be more competitive than they have been so far.

The different course of acreage in these four countries as contrasted with the course in all other foreign countries combined is particularly significant in relation to the current proposal to check foreign cotton expansion by subsidizing exports. During the past 18 years the price of American cotton has had a most violent history and has pursued a downward trend. Yet the response of foreign cotton acreage to these price gyrations has been different in almost every country, with some countries showing no apparent response to the drop in price from around 30 cents in 1923 to less

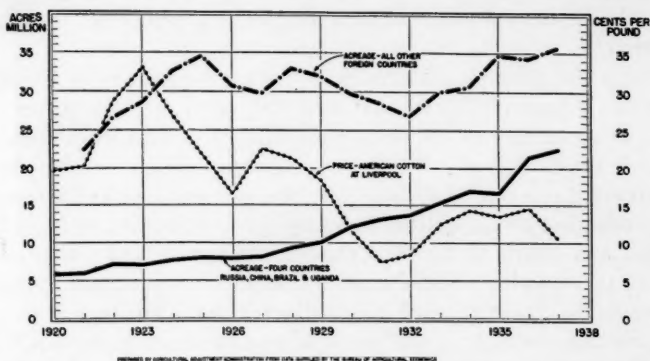


CHART II. COTTON ACREAGE IN FOREIGN COUNTRIES AND WORLD PRICE OF AMERICAN COTTON, 1920-1937

than 5 cents in 1932. In each country there are other factors besides the price of American cotton that help determine the acreage planted to cotton. While this is an obvious point, it may be worth while to observe the acreage records in countries where the price influence of American cotton has been outweighed by other factors. We may note first that the total acreage in cotton in the four countries, China, Russia, Brazil and Uganda, increased almost continuously from 1921 to 1927; this in spite of the fact that between 1923 and 1926 the world price of American cotton was reduced by more than 50 per cent. (See Chart II.) On the other hand, the total acreage in all other foreign countries reached a

peak in 1925 and was reduced in both 1926 and 1927, chiefly in India and Egypt. After 1927 the total acreage in the four countries continued to expand but at a more rapid rate, with practically no check through 1937; this in spite of the decline in the world price of American cotton of 66 per cent between 1928 and 1932. The total for all other countries increased in 1928 and then declined in four successive years until 1932; since then there has been a restoration to the acreage total of 1925. These facts suggest very clearly that if, for example, the price of American cotton had been kept at 6 cents in 1933, it would not necessarily have prevented the rapid expansion in countries where expansion had been planned and where governments through monetary and trade policies have cushioned their domestic prices against low prices of American cotton.

Take, for example, the course of cotton production in a single country—Russia. What has been the effect of low prices of American cotton on the long-time history of cotton in Russia? Before the Civil War in Russia in 1917, cotton production had been increasing at a rate of about 10 per cent per year and had attained a production of 1.5 million bales by 1915. (See Chart III.) By 1921, as a result of the Revolution, production had fallen to a mere 43,000 bales. Rapid recovery set in after 1922 and by 1930 production again reached 1.6 million bales. By 1937 Russian production reached 3.5 million bales and this is only about a half million bales less than Russian production would have been had it continued to expand at the prewar rate. Thus, it took 15 years to recover from the effects of the World War and Civil War and another seven years to approach the normal volume.

This experience is peculiarly similar to our own before and after our Civil War. Just before the Civil War our production had been expanding at a rate of 6 per cent per year, and in 1861 had reached 4.5 million bales. In 1864 practically no crop was produced, a mere 200,000 bales, but thereafter a rapid restoration took place and by 1877, after an interval of 16 years, we again had a crop of 4.6 million bales. In the course of the next five years our production approached the volume called for by a continuation of the prewar trend. In both countries production was set back by about 20 years.

On the basis of this similarity, one more observation may be made, and that is that if it continues for another five years, Russian production may be expected to reach four to five million bales. And this, too, may come about with as complete independence of the course of American cotton prices as seems to have been the case in the past. Internal industrialization policies in Russia and not the course of American prices have been responsible for the postwar rapid expansion. Lacking knowledge to the contrary we may reasonably assume that these policies are likely to continue to

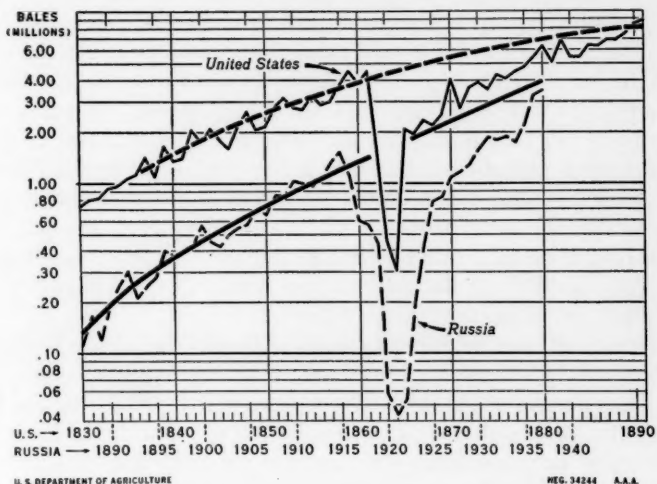


CHART III. COTTON PRODUCTION BEFORE AND AFTER THE CIVIL WAR IN THE UNITED STATES AND RUSSIA

influence expansion in acreage and improvement in cultural methods in the immediate future.

Postwar history of cotton expansion in Brazil also throws some light on the question as to whether or not low prices of American cotton would with certainty check or reduce foreign competition. Since the war there have been two periods of cotton acreage expansion in Brazil. Between 1920 and 1925 acreage expanded from about 1.0 to 1.5 million. After a small contraction in 1926 and 1927, expansion was resumed and attained 6.4 million acres in

1936 with only one noticeable curtailment in 1932. This recent growth, it has been often argued, was produced by the devices resorted to by the United States to raise cotton prices above the 1932 low level and by the assumption on the part of Brazilian and other interests operating in that country that the United States is to continue a restriction policy. Many in the South have practical knowledge of and experience with the stimulus that is being given to cotton production by Brazilian government policies and by American capital. Nevertheless, it may be worth while to examine some of the price factors that are involved in that expansion. The prices that we need to examine are those for cotton in Brazil and in the United States, and coffee in Brazil. In the years 1925 to 1929 during the harvest season March-June, the price of a pound of cotton in Sao Paulo, Brazil, averaged only about 10 per cent more than the price of a pound of coffee, and during this period cotton acreage in Sao Paulo was reduced from 236,000 to 52,000. After 1929 the spread in favor of cotton increased greatly and cotton acreage began to expand. In 1932 the spread in favor of cotton was 47 per cent; the next year 50 per cent; in 1932, 90 per cent; in 1933, 143 per cent; in 1935, 176 per cent; and in 1937, 80 per cent. (See Table I.)

It is clear that the price of cotton in Brazil relative to the price of coffee is the important price factor in the cotton expansion that has taken place in Sao Paulo. And since this expansion is related to cotton prices relative to coffee prices, it is important to observe which of the two has been the prime factor. We need to observe also what effect American cotton prices have had on Brazilian cotton prices, for if lowering the price of American cotton is to have a retarding effect on Brazilian acreage, it can do so only through a comparable lowering of the price of cotton in Brazil as well as in the consuming markets. In 1929 when cotton acreage was low, a pound of Brazilian cotton and a pound of Brazilian coffee had about the same value in American money—about 19 cents a pound. In 1932 cotton was down to 9 cents and coffee to 4.8, cotton having a 90 per cent advantage; and acreage was substantially increased. Thus it is significant that the expansion was initiated two years in advance of the Agricultural Adjustment Administration programs in a situation where both cotton and

coffee prices were low but coffee prices so much lower as to give cotton production a substantial advantage. Vigorous expansion began after 1929 when the price of cotton in Brazil, as distinguished from the price of cotton on a gold basis, showed a wide margin in excess of the Brazilian price of coffee.

It would not be safe to conclude from these facts that lowering the price of cotton in the United States would necessarily cause

TABLE I
MARCH TO JUNE AVERAGE PRICE OF COTTON AND COFFEE, THE RATIO OF COTTON PRICES
TO COFFEE PRICES, AND THE COTTON ACREAGE PLANTED IN SAO PAULO,
1924 TO 1937

YEAR	AVERAGE PRICE OF		RATIO OF COTTON PRICES TO COFFEE PRICES	COTTON ACREAGE PLANTED (SEPT.-NOV.)
	Cotton	Coffee		
	March to June	March to June		
	<i>cents per pound</i>	<i>cents per pound</i>	<i>per cent</i>	<i>acres</i>
1924	33.25	14.11	235.6	337,712
1925	22.18	18.88	117.5	235,857
1926	17.55	17.48	100.4	130,288
1927	17.17	13.42	127.9	104,770
1928	22.18	19.62	113.0	92,489
1929	19.14	19.41	98.6	52,227
1930	16.24 ^a	11.07	146.7	148,260
1931	8.62	5.74	150.2	228,091
1932	9.10	4.80	189.6	299,379
1933	11.74	4.84	242.6	971,830 ^b
1934	11.46	6.78	169.0	1,357,790
1935	13.57	4.91	276.4	2,426,146
1936	11.57	5.04	229.6	^c
1937	13.48	7.50	179.7	^c

Compiled from official sources, Bureau of Agricultural Economics.

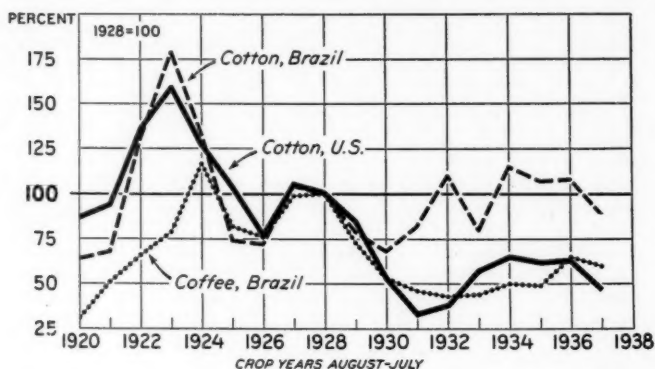
^a Average of 2 months (March and April).

^b Subject to revision.

^c Not yet available.

cotton acreage curtailment in Brazil. In the first place, a decline in the price of cotton might be accompanied by a similar decline in the price of coffee, and this would not alter the relative advantage for cotton production. Secondly, a decline in the price of American cotton might be offset by exchange manipulation in Brazil so as to protect the price of cotton in Brazil. This is, in fact, the situation that has prevailed ever since 1929. During the

1920's the price of cotton in Brazil and in consuming markets fluctuated up and down with the price of cotton in the United States but since 1930 cotton prices in Brazil have not followed cotton prices in the United States. (See Chart IV.) Monetary devaluation and exchange devices have kept the price of cotton to producers in Brazil at or above the predepression level, while prices in the United States have ranged between one-third and two-thirds of the predepression price. Thus in the 1936 season the price of cotton in Brazil was 8 per cent higher than in 1928, while the price of cotton in New Orleans was 37 per cent below that of 1929 and the price of coffee in Brazil 35 per cent below.



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CHART IV. PRICES OF COFFEE AND COTTON IN BRAZIL AND COTTON IN THE UNITED STATES

As long as foreign governments in behalf of their producers utilize monetary devices to offset the price policies of competing countries, there is no guarantee that low price competition will check foreign production.

In the case of Uganda and China, the other two countries where cotton acreage is being expanded, low price competition is also not certain to serve as a check. In Uganda we are seeing the results of long-time colonial development policies, and in China we are seeing the growth of cotton production as an accompaniment of the rise of the textile industry in Japan and China. In

these trends the price of American cotton, while an important factor, appears to be dominated by other more important considerations.

III

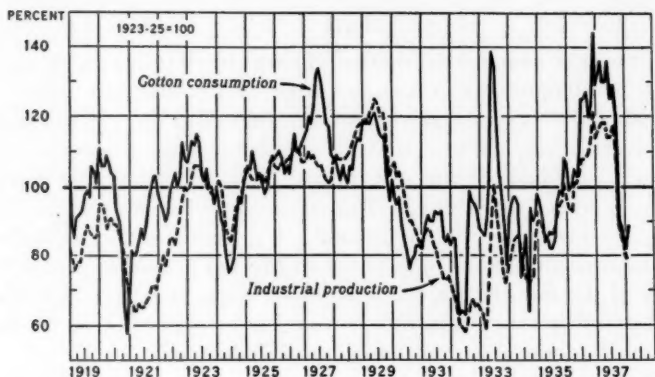
Let us now examine another set of long-time data, those dealing with consumption of American cotton in the domestic markets and abroad. It is commonly assumed that the efforts of the past few years to keep the price of American cotton above the low levels of 1932 have had the effect of curtailing consumption both in the home markets and abroad. This argument with respect to the domestic market is sometimes made in spite of the fact that domestic consumption in 1936-37 reached record proportions, and in spite of the fact that in the years 1933, 1934, and 1935 domestic mill cotton consumption was at a higher level in relation to the general business situation than is usually the case.

Theoretically, it is true that consumption is less at higher prices than at lower prices, and in practice this is true for certain types of cotton consumption. In general, however, it is the course of industrial activity rather than the price which is the predominant factor in consumption, and too great a preoccupation with price may blind us to this more important determinant of domestic consumption.

This dependence of domestic mill consumption of cotton on industrial production is clearly revealed in the general similarity between the monthly fluctuations over the past 20 years. (See Chart V.) In only a few cases do we find major departures of the course of cotton consumption from the general level of business. In 1922, 1926 and 1932 low prices and the prospect of rising prices stimulated relatively higher levels of cotton consumption. In 1924 relatively high prices had the opposite effect. The record consumption of the 1936-37 season was in part due to the general level of improved business and in part to speculation in the textile industry. That abnormally high level of cotton consumption was not associated with any marked change in the level of cotton prices.

If we now turn to the long-time trend of domestic cotton consumption, we may obtain a suggestion as to what it is likely

to be over the next few years. After the setback given to domestic consumption by the Civil War, per capita consumption increased



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CHART V. COTTON CONSUMPTION AND INDUSTRIAL PRODUCTION IN THE UNITED STATES, 1919 TO 1937

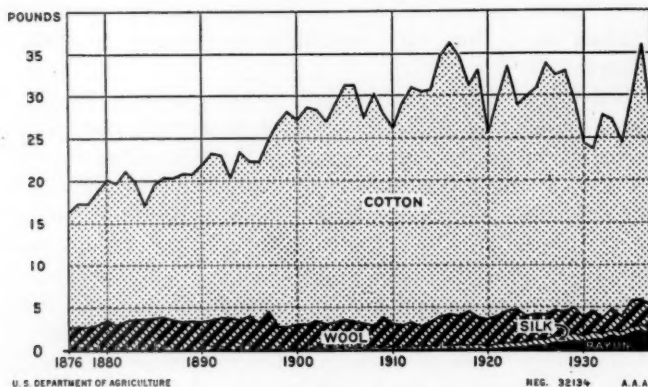


CHART VI. PER CAPITA MILL CONSUMPTION OF TEXTILE MATERIALS IN THE UNITED STATES

fairly steadily from about 11 pounds in the five-year period ending in 1870-71 to 30.7 pounds in the five-year period ending in 1915-16. (See Chart VI.) Since then the upward trend has not been main-

tained. In the subsequent five-year periods per capita consumption amounted to 31.6 pounds, 29.5 pounds, and 29.7 pounds. During the depression years ending in 1935 only 25 pounds were consumed on the average, and during the two seasons 1936-37 and 1937-38, the average was again nearly 30 pounds. About 10 per cent of these quantities is made up of linters. Thus it appears that during the past 25 years the average per capita consumption has been about 27 pounds of lint cotton and about three pounds of linters. In this connection, it is to be noted that per capita consumption of cotton failed to increase with the decline in the level of cotton prices in the five-year period ending in 1920, 1925, and 1930.

Apparently, to get a more abundant consumption of cotton in the United States as an offset to the decline in foreign demand, it will be necessary to discover new uses for substantial quantities or to have a substantial increase in the purchasing power of the lower income groups of our population. Over the next five years, the population of the United States is not likely to increase by more than 4 per cent, and if the average per capital consumption remains around 30 pounds, domestic consumption of cotton without new uses and new purchasing power is likely to hover around seven million bales.

IV

The international factors which have been at work making for foreign cotton expansion and counteracting the influence of the price of American cotton are naturally reflected in a long-time decline in our share in foreign cotton consumption. Before the war (in the seasons of 1911 and 1912) American cotton supplied about 60 per cent of total foreign consumption of all kinds. (See Chart VII.) Ten years later in 1921 the proportion was only 48 per cent and again ten years later in 1931 it was down to 44. During the 1934 and 1935 seasons, it was down to about 30 per cent, and during the 1937 season to about 25 per cent. It is clear that a large part of this decline occurred in the 1934 season. Undoubtedly the 12-cent loan and our holding program were instrumental in creating a price advantage to foreign cotton. There were, however, certain long-time tendencies and other concurrent developments that must be taken into account if a balanced appraisal

is to be made of the effect of American prices since 1932 on our reduced share of the foreign market for cotton.

Prior to 1932 the downward drift in our share of the foreign demand for cotton was particularly noticeable in the United Kingdom and Germany, and to some extent in France in the early

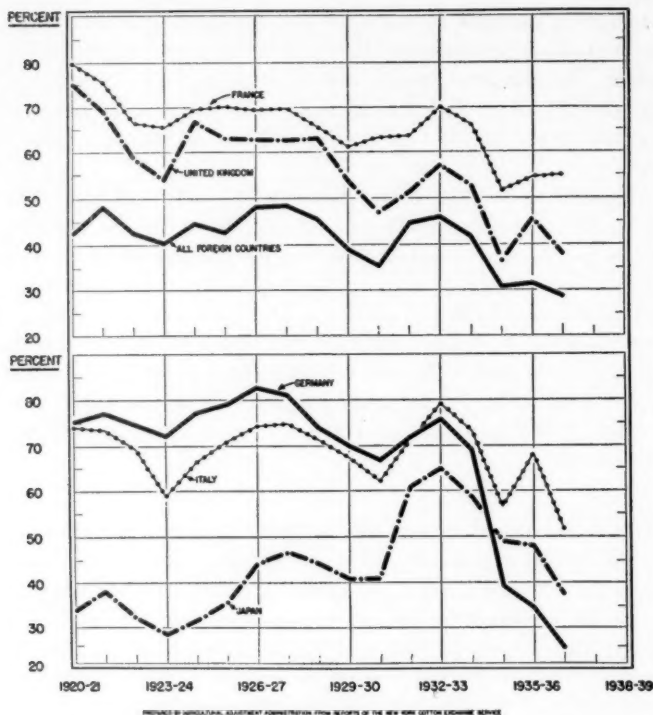


CHART VII. AMERICAN COTTON—PER CENT OF ALL KINDS CONSUMED IN FOREIGN COUNTRIES, 1920-21 TO 1936-37

1920's. This was in part offset by the rising importance of our cotton in Japan. In the consumption of all of these countries, we can discern the effect of the changing relation of American cotton prices to the prices of competing cotton. In some countries the effect can be seen more clearly than in others.

If we examine these influences closely, country by country, we

can see fairly clearly that the sharp reduction in our share of the foreign cotton market in the 1934 season was due in large degree to factors other than the relatively high prices of American cotton. The price relationships in 1934 were very much like those of 1922 and 1930 that favored foreign cotton.² From the experience of these years and allowing for the long-time changes, our share in the Japanese market should have been about 48 or 49 per cent in 1934 compared with 59 the year before. The actual percentage was 49. For the United Kingdom, past price relationships and trend called for a 42 per cent share instead of 63 per cent the year before; the actual percentage was 36. Thus in both of these countries most of the 1934 reduction in consumption appears to be related to the increase in the relative prices of American cotton in that year. In Germany, however, we should have had approximately a 63 per cent share compared with 69 per cent the year before, and actually we had only about 39 per cent. Here only one-fifth of the drop in consumption appears to be related to the price situation and the other four-fifths to other factors, such as the barter arrangements entered into between Germany and Brazil, the shortage of foreign exchange, and the sharp expansion in the use of synthetic fibers.

Only part of the reduction in imports of American cotton by Germany after 1933 has been made up by imports of cotton from Brazil and other countries. The deficit has been in part made up by the rapidly increasing consumption of rayon. In 1920 the consumption of rayon yarn and fiber in Germany amounted to only 1.5 per cent of cotton consumption; by 1930-33 this had grown to 12 per cent, but in line with its previous rate of growth it jumped from this figure to 26 per cent in 1934 and to 30 per cent in 1935. For the four countries, United Kingdom, Germany, France and Italy, rayon amounted to about 1 per cent of cotton consumption in the early 1920's, 10 per cent in the early 1930's, and 16 and 19 per cent respectively in 1934 and 1935.³

It is factors such as these that have kept our share of the foreign

² Prices of Indian, Egyptian and Brazilian cotton as percentages of American cotton in Liverpool were respectively: 72.1, 104.6 and 96.0 in 1922; 72.7, 119.9 and 98.1 in 1930; 72.3, 108.8 and 98.8 in 1932.

³ Bureau of Agricultural Economics, U. S. Department of Agriculture, data compiled from publications of Textile Economics Bureau, International Federation of Master Spinners and Manufacturers Association, and New York Cotton Exchange.

markets relatively low since 1934. Consequently, it must be quite obvious that a mere lowering of the world price of American cotton is no sure way of regaining a normal share of the foreign cotton markets. Entirely different solutions of the cotton producers' and cotton shippers' problems are required to give foreign countries like Germany dollar exchange with which to buy American cotton instead of buying other kinds through barter arrangements. More than a low price policy in this country is required to remove other foreign trade practices which now serve to hamper our cotton exports to other European countries. To dissuade governments in competing countries like Brazil from using monetary devices to protect prices to their producers from low price policies in this country requires more than our undertaking to produce larger crops. And furthermore, in so far as part of the decline in our share of the foreign cotton market is due to our lack of attention to quality and up-to-date merchandising practices, we also need something more than a large volume-low price approach.

In some respects our present experience with the shifting position of American cotton in world trade is like that of other major export farm products during the past three decades. The experience of our meat packers in the foreign markets for our livestock products is pertinent. According to the records of the Bureau of Foreign and Domestic Commerce, our beef exports reached a peak in 1901, most of it going to the United Kingdom. We had been supplying the United Kingdom with about 90 per cent of the imports of fresh and frozen beef in the early 1890's, but by 1900 this share had fallen to 70 per cent due to increasing imports from Australia, New Zealand and the Argentine. By 1904 Argentine shipments to the United Kingdom advanced so rapidly that our share in the British beef market fell to 55 per cent. Our packers not wishing to lose their British customers determined to invest in the Argentine and participate in the expansion of foreign production competing with our own. Swift and Company began operations there in 1904; Wilson and Company in 1905; and Armour and Company in 1911.⁴ By 1913 we were practically out

⁴ D. E. Rechelet, *The Argentine Meat Trade*.

of the foreign beef market, and practically the entire imports into the United Kingdom came primarily from the Argentine and in part from Australia, New Zealand and other countries. Our packers thus transferred American capital to South America and participated in the building up of the Argentine meat packing business.

This episode in beef exports is not necessarily a dire prediction of a still further decline in our share of the foreign cotton markets, but rather a suggestion of the fact that the cotton problem must be viewed in terms of dynamic shifts in world trade. These shifts have been going on for years. They have been facilitated by our willingness to share with the rest of the world the fruits of our technological progress such as farm machinery, and the fruits of our agricultural research such as improved seeds and other cultural practices. They have been facilitated by the free flow of our capital and our managerial and technical talent. And finally, they have been promoted by an ever increasing amount of world-wide governmental interference with economic activity. It is in this setting and not in the laissez-faire hope of the efficacy of larger volume at low prices that a progressive solution of our cotton export problem must be found.

THE PRINCIPLES OF ECONOMIC STRATEGY

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Unless social control is to be mere tinkering it must be guided by some general policy. We are confronted at the present time by two types of policy each of which offers itself as a guide to a general program. Not only do these two policies of *laissez faire* and economic planning seem to be opposed: they seem to divide the entire field of theoretical possibilities so that every conceivable program must be plotted in one direction or the other or along a line that is defined by its relative distance to one and nearness to the other.

Nevertheless the opposition between what is called the economy of free private enterprise and what is called the planned economy is curiously superficial. At a number of points anomalies appear which suggest that these contrasts are largely verbal, a matter of epithet rather than reality, and even that the policies themselves are much less securely grounded than their several advocates suppose. They are tactics rather than strategy, and unfortunately the tactics of a strategy which in the case of *laissez faire* has been forgotten while in the case of economic planning it still remains to be thought out.

For instance, in the minds of its advocates at least *laissez faire* stands for that freedom of the individual which is so precious to democracies. This impression derives from the historic fact that a policy called *laissez faire* was indeed practised first and longest by those countries in which democratic political institutions have prevailed. But it is no less a fact that the chief advocates of the policy which is now called *laissez faire* are men of wealth and their spokesmen, the political and academic conservatives; while the policy of economic planning has been carried to its highest pitch in the Soviet Union where in spite of many shortcomings it has greatly benefitted a very large mass of common people. Mean-

time economic planning is advocated by liberals and radicals and practised most extensively by dictators.

But what is most disconcerting is the singular shallowness of both these policies. If we are to practise a policy of let-alone, there must be something to let alone. The fathers of this classical theory had in mind a fairly extensive picture of the economic world they proposed to let alone, but that is no longer true today. Classical theory has become a system of logic or even mathematics, a description of what the world would be like if it were like that, not an account of living actuality or even of what is supposed to be actual. Monopoly and the business cycle, originally advanced by critics as difficulties, have now been assimilated into orthodox theory. Does this mean that we should let cyclical fluctuations alone— and imperfect competition? Just what should we let alone? The appalling truth is that orthodox theory has no answer to this question.

And the case of economic planning is the same. The word "plan" suggests a set of blue prints containing the design of the whole structure for which ground is being broken. But what plan? Orthodox critics denounce all economic planning as the work of would-be dictators, but the curious thing is that even the real dictators have no plan in the strategic sense. They conceal the deficiency with a smoke-screen of political metaphysics. The key to their plan, it would seem, is the apotheosis of the Nation and the self-realization of the Race, which is to say there is no key and no plan, only political opportunism and military bluster. Economic planning is dangerous not because it leads to dictatorship, but because it may lead nowhere even under the dictators. It is only an attractive phrase, like *laissez faire*.

Before any system of tactics can be made to work we must have a strategy, that is to say some understanding even in very general terms of what it is we are trying to do. Although it has been almost completely lost from sight, classical theory contained such a strategy, and we can scarcely do better in the present situation than inquire what it was. That the economics of Smith and Ricardo did provide some sort of perspective in which to view industrial society as a whole and some sort of guidance to economic policy as a whole I fail to see how anyone can doubt. The per-

spective may have been false and the policy mistaken. I think they were. Nevertheless the theory of price equilibrium and the policy of laissez faire did in fact save the industrial world from the chaos into which it was being pushed by the same forces which are now at work again, or yet: the politics of nationalism and the economics of beggar-my-neighbor.

The central idea of classical economic theory was that of equilibrium. Unfortunately this idea found its way into political economy in the form of natural order. We have no right to reproach the founders of our science for this contretemps. In their day even the physical sciences were fascinated by the thought of the mathematical genius of a Creator capable of balancing the product of the masses of the stars against the square of their distance. All science, it was thought, only revealed the natural harmony implicit in the universe since its creation. Economics may be said to have taken the rank of a science with the dawning realization that prices might be regarded as the masses and distances of the commercial world and might even reveal a harmony as natural and perfect as that which appeared in the calculations of astronomers and physicists. Such a harmony would require to be let alone not as a matter of prudence—that would be the equivalent of the schoolboy notion that Newton invented three laws of motion which it would be well for all of us to follow—but rather as a matter of necessity, inasmuch as a natural harmony will inevitably re-establish itself in spite of any conceivable disturbance.

As everybody knows, classical theory was the elaboration of this idea. But midway in the nineteenth century physical science underwent a profound change as a result of which the concept of natural harmony was completely abandoned. Modern science contrasts with that of the seventeenth and eighteenth centuries chiefly at this point; it is mechanistic throughout, completely devoid of the teleology that was implicit in the philosophy of natural order. Economists have been no less susceptible than everybody else to this change of intellectual climate, and since it has become philosophically impossible for them to go on building a theory of a natural harmony of prices they have adjusted themselves to this necessity by disavowing the notion on which their theory of prices rested, retaining only price theory itself and the conviction that something or other must be let alone.

Now that has been a very great misfortune not so much because classical price theory is meaningless when it is detached from the idea which it was originally conceived to exemplify as because the idea of natural harmony was the key to classical economy strategy. Our lack of strategy is due to the collapse of the idea of equilibrium more than to any other one cause, and that collapse is not altogether attributable to the change of climate. Physical science has exorcized the ghost of natural order, but it still finds many important uses for the concept of equilibrium. Or perhaps I should say therefore it does so. Because no suggestion of divine ordination any longer attaches to any equilibrium, scientists can make useful distinctions between stable and unstable equilibria. For example, the earth's crust is in more stable equilibrium in the vicinity of Boston than in the vicinity of Los Angeles not because Boston is any more holy than Los Angeles but because of specific differences of geological structure equally natural in both areas. Economics has failed to make this adjustment because it has thrown out the baby and retained the bath. Instead of revising the idea of equilibrium of which the natural order of prices was once thought to be the expression, it has retained its obsession with "normal" price rejecting only the one sound reason for that preoccupation.

These reflections suggest at once that what we need as the foundation of a new economic strategy is a fresh, modern, scientifically sound idea of equilibrium. Civilization is a complex thing. Not even the simplest society could exist if everybody were continually asking as children do, "What shall I do next?" Community life requires some sort of order and system. As we all know, the patterns by which all civilized communities exist are historic growths. Their chief constituent is habit, custom, tradition, "the way things have always been done," as people say. Immemorial tradition is at a discount in modern industrial society, partly because the industrial revolution has brought changes of unprecedented magnitude and speed, and also partly because science has upset the beliefs by which tradition has always hitherto been implemented. The need to which the classical economists responded was partly for the greater flexibility demanded by industrial society and partly for the greater enlightenment demanded by the age of reason. But modern society

is by no means in a position to dispense with habit. The more intricate and mobile our arrangements have become, the more essential for us is a modicum of continuity—of residence, of craft and profession, of habit of life.

These are physical continuities. The stability without which civilization is impossible, the reality behind all immemorial beliefs and all enlightened social theories, is physical stability. Every call to revolution and every program of social control necessarily assumes that we will continue to eat the seeds of the grains and the flesh of the beasts, to wear clothes that button down the front, to live in glorified rabbit warrens, and to play golf. Whether we approach the problem by the analysis of present difficulties or by the study of the classics we are inevitably brought to the same conclusion: the first principle of all economic strategy is physical stability.

For a century and a half we have been accustomed to think of economic stability in terms of prices. But economic stability can certainly be understood in such physical terms as the relation of food supply to population, the regularity of the working habits of the people, continuity of operation of machines, and so forth. There is nothing esoteric about it, or even complicated. For it must be understood at once that the adoption of the principle of physical stability does not by any means require a set of blue prints showing the place of every man and every tool at every hour of the day to an indefinite future, any more than our past reliance on the principle of price equilibrium presupposed a similarly detailed knowledge of the movements of all prices whatsoever and of all the things of which they were the prices. A principle of strategy undertakes to state in general terms what it is that we are trying to do, and no more. This is illustrated by two contrasting types of military strategy, one of which undertook to win wars by exterminating the enemy armies, while the other proposes to break the enemy's will to fight. How the thing is to be done in either case is the problem of the tactician, but obviously he can begin to operate only when a decision has been reached as to what he is to try to do. It is this decision with which we are confronted: to seek economic stability conceived not in terms of price equilibrium but in physical terms as stability of men, machines, and operations.

This way of putting it emphasizes production in a fashion that many students may deplore. I confess that I once shared the opinion that consumption is the end and purpose of all economic activity and should therefore be the first and chief object of theoretical concern. I felt as many do that one of the grossest faults of the classical economists was their excessive preoccupation with production to the almost total exclusion of consumption. But further study has revised this view. I should now say just the reverse, that the trouble with classical theory on this score is its unconscious preoccupation with consumption (or rather, with distribution) to the almost complete neglect of the production toward which it is ostensibly addressed. The classical economists understood, by instinct as it were, that a community can distribute and consume only as it produces, just as they felt that what we are after is stability. Consequently they addressed themselves first and foremost to the problem of production. But the supposed natural harmony of prices in terms of which they expressed their notion of stability also imposed a theory of value on their analysis of production. There was a theory of the production not of goods, which might or might not be measured accurately by prices, but of values which could be harmonized with price by definition.

In the theory of value wants are the primary data. We are told that wants are given. There is no going back of them, and for this reason theoretically they dominate production since production is only the means of satisfying wants, which are ends. But this is a singularly paradoxical proposition. There is only one sense in which consumption can be regarded as the end of all economic effort and that sense is unknowable. The whole idea reeks of teleology. It implies clearly that we know God's purpose in the universe. No science, not even so practical a science as medicine, makes any such assumption. Scientific reasoning is always conditional, proceeding from "if" to "then." Who knows whether health is the aim and end of human existence, or even longevity? Perhaps we are defeating God's purpose when we snatch souls back from heaven to endure a longer stay in this vale of tears. Medicine only tells us how to do it, not that the doing is a consummatory end. However fascinating it may be to speculate about the ultimate meanings of things, the only mean-

ings of which we have any positive knowledge are relative, and hence not consummatory and not ends. There is no use in going over the ground of this ancient controversy. If anything in the whole field of the social sciences can be regarded as positively established it is that all human wants are socially conditioned. Economists who still hold the contrary view are not allergic to scientific demonstration. They persist in asserting that no one can go back of wants because they have taken a hearty dislike to the people who propose to do so. Such people, they say, and in recent years they have been quite candid about saying it, look to them like would-be dictators. A number of critics of neoclassical theory have pointed out that its contemporary advocates are making a fetish of economic freedom, and several eminent defenders of primacy of wants have stated plainly that they regard such freedom not as a condition of economic order but as an end toward which all economic arrangements ought to be directed.

In this case also, I believe, the real difficulty is not so much an opposition of ideals as a confusion of strategy with tactics. If the adoption of an economic strategy based on production meant telling everybody exactly what he should have and precisely what he should do and be at every hour and throughout his life, that would of course be a totalitarian nightmare. But does it? Machine production has transformed western civilization not because it has placed any particular object in our hands to sate any particular want but because it has multiplied the production of all goods and the satisfaction of all wants. The principle of economic strategy which emerges from the realization of this fact is that of the expansion of production as such and in general. The question, "Production of what?", is irrelevant to this principle. There is no point to saying before you can begin to produce you must know what people want. No society begins to produce. Society is a going concern largely by virtue of the fact that we produce what we can. The effective modification of our habits of consumption does not come about as a result of spiritual revelation made manifest in wants, or by the imposition of some people's ideals on other people. The actual changes come through the adjustment of consumption to the exigencies of production. Our community is much less drunken than that of our great-

grandfathers not because our wants have been refined but because we have learned that liquor and machines simply do not mix. No amount of preachment about the absolute value of freedom alters the fact that a drunk driver is a menace to the whole automotive community, and consequently our police are enforcing the ordinances against drunken driving as they never even tried to enforce the moral principle of prohibition. We do not hesitate to tamper with people's wants when they run athwart the productive interests of the community in public sanitation, and we are beginning to learn that dietary deficiency is also contrary to the same common and general interest in physical, productive health.

We are even beginning to wonder more seriously than ever before if it is to the economic interest of industrial society for two-thirds of the population to be ill-fed, ill-clothed, and ill-housed—and this brings us to a third principle of economic strategy. In order to produce we must consume. Economic stability and the full utilization of our productive skill are contingent on the distribution of consumer purchasing power.

The classical economists knew by instinct that production and distribution must be geared to each other so as to revolve simultaneously as a single smoothly articulated mechanism. I do not recall that anybody ever thought of trying to prove that this is so. It is implicit in the idea of economic order. If our economic activities fell into distinct and unrelated, even it may be divergent parts, there would be no such thing as an economy. The whole idea of an economic system is contingent on the assumption that production and distribution coincide and are different aspects of one and the same thing.

By a very great misfortune, however, the founders of political economy mounted distribution and not production on the engine blocks of their assembly. That is, they described production not in terms of tools and materials, scientific knowledge and engineering skill, executive organization and trained labor, but altogether in terms of what they called the factors of production. These are in actuality the factors of distribution, since they can be defined only in terms of participation in the division of gross income and are distinguished from each other explicitly by the manner of their participation.

It is the concept of capital that is chiefly responsible for this appalling error. That is what the socialists have always felt more or less by instinct, and we are beginning to realize that their instinct has been sound. It would not be fair to hold the fathers of economics personally responsible for this mistake. In confusing the physical instruments of production with sums of money they were only giving effect to the general opinion of their day, and for that matter our own. But however it came about, the upshot is that classical economic theory revolved about the notion that production is made possible only by the accumulation and investment of sums of money, and consequently that the accumulation and investment of capital as thus conceived was necessarily the first anxious care of a sound economy. Therefore the agents of production were defined so as to give capital funds a place virtually at the head of the council table, and the whole process of production no less than distribution was conceived in terms of values among which capital values could always be traced like a colored thread from one process to the other.

As a result chiefly of this way of thinking industrial society has always suffered from a deficiency of consumer purchasing power. The symptoms have broken out more violently at some times than at others, but the condition has been chronic. It is no use saying with stoic fortitude, like a millionaire accepting the business cycle as a fact, that this is how the system works. The over-accumulation of funds is not attributable to any eternal and immutable condition of affairs. It is in large part the effect of an obsession. Like Mr. Keynes I believe in the power of ideas, especially the ideas of economists long dead, and especially their worst fallacies, since those are the ideas most closely attuned to common prejudice in their time as well as ours. From the time when commercialism first became the dominant force in western society we have been fascinated by what appeared to be the magical power of sums of money to set the wheels of industry in motion, and consequently in all our economic planning our chief solicitude had been for the accumulation of capital in the sense of funds. The result has been a chronic deficiency of consumer purchasing power.

Since the point of greatest capital accumulation is at the top

of the income scale while the point of greatest deficiency of consumer purchasing power is at the bottom, the problem obviously is one of distribution. But the key to the problem is the principle of expansion of production. Indeed the problem is insoluble on any other basis. Men of good will have always deplored poverty, but humanitarianism has always faced an impasse in the doctrine of capital accumulation. So long as poverty seemed to be the price we paid for economic stability the argument that the price simply had to be paid has been conclusive. The only way through this impasse is along the lines of the principles of stability and efficient production. We can have economic stability only by achieving a sound system of production, and we can have a sound system of production only by consuming what we produce. The principle of expanding consumer purchasing power is a derivative of those basic principles of economic strategy to which we have already given our assent.

The procedures by which the flow of income to the bottom of the scale might be increased so as to absorb the product of an expanding productive mechanism constitute a problem of tactics and have no place in a discussion of strategy. But there is no use in defining an objective which is impossible of attainment. The opinion seems to be widespread that no such procedure is possible because the requisite income is not available for distribution. It is now generally admitted that the recovery of 1934 to 1937 was substantially affected by governmental distribution of purchasing power, that the recession of 1937-1938 was also materially affected by the dwindling of this flow of income accentuated by rising prices, and that the recent upturn is due largely to a resumption of government "spending," as it is called. But the crucial question in the minds of many people is, What is going to happen when the funds give out? This question is usually asked as though it were patently unanswerable, but actually that can be assumed only on the basis of a gross misconception of what is going on. Our recent financial maneuvers have indeed increased the national debt, and there may perhaps be a point beyond which it is not politically safe to pile up such a debt. But that limit is not one of a deficiency of funds. Contrary to a widespread notion, we never borrow from the future; we

borrow from each other. Surely any well instructed sophomore should know that every last item of the recent governmental program has been financed out of the current national income. To argue that such diversion of income must come to a stop for lack of funds at the very moment when the latest issue of Treasury notes is being over-subscribed ten times is to talk plain nonsense.

What people really mean, whether they know it or not, when they talk about the eventual exhaustion of governmental credit is that perpetual borrowing eventually comes to be recognized as a form of taxation, and when that happens it will be resisted. That may be so. But economic impossibility is one thing and capitalist resistance is quite another. For many years the socialists have been preaching that capitalism is doomed because, when we arrive at the crisis, the capitalist class will resist the adjustments on the basis of which alone the industrial economy can be made to work. It is precisely for this reason that they insist on the liquidation of the capitalist class and the expropriation of all the instruments of production as a preliminary to rebuilding a stable industrial society.

We have it in our power to prove the socialists right by offering the resistance they predict. We do not have it in our power to maintain a stable economic order on a basis of chronic deficiency of mass purchasing power. Deficiency of purchasing power necessarily means restriction of production, and—as we ought to know by now—restriction of production means extreme instability of the whole economic mechanism. Either we must find a way to distribute purchasing power in such volume as to permit the full utilization and continued expansion of our productive system and so attain the stability which all economists have sought, or we must prepare to face the deluge only hoping that some other political regime will be wise enough to do what we have failed to do.

THE PRESENT STATUS OF MONETARY AND CREDIT CONTROL

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The countries of the world have been experimenting with currency and credit management for more than twenty years; and since the abandonment of the pre-war gold standard in 1914, all countries have been operating under some kind of managed currency. The objectives of this management have been varied. During the war the objective was inflation as an aid to winning the war; during the 1920's it was in some countries to stabilize the disordered currencies, to restore the gold standard, and to revive foreign trade; in other countries it was to further economic nationalism by stimulating exports and restricting imports; in this country it was to stabilize the price level in the hope of creating a new era in which trade cycles would be unknown. In recent years, most countries have attempted to lift themselves out of the depression by monetary management, through reflation of prices and reduction of interest rates. We have built up powerful mechanisms for artificial control of the quantity of money and credit, have enlarged the powers of central banks, and have supplemented these powers with governmental banking agencies and stabilization funds. We need now to face the question whether we really know how to use the new powers of monetary and credit control.

I

The theories and applied policies of currency and credit management have been developed only in recent years, as an outgrowth of national monetary policies during and after the war, and of recent studies of the business cycle. The possibility of monetary management for the control of the price level is, however, not a new idea of our own generation, and is not an invention of profes-

sional economists. The popular mind has always sought a monetary remedy for periods of falling prices and depression. Falling price levels that destroy producers' markets, impoverish farmers, and multiply the burdens of debtors have always created a popular demand for more money and easier credit. The inflation bloc sometimes slumbers, but it never dies. So strong has been the popular opposition to a falling price level that governments have never permitted a long continued fall in prices. Since the Middle Ages we have had a gradually rising price level, and this, at many periods, has required government intervention or management of the currency.

From Roman times to the sixteenth century there was no important addition to the world's supply of the precious metals, and prices must have fallen disastrously except for currency management. The mediaeval currency of England was probably not deliberately managed, but it was so manipulated as to maintain a stable price level for 200 years. Adam Smith noticed that during the Middle Ages the price of wheat was steady for 200 years, while the quantity of silver in the shilling was constantly diminishing; and said that the increased value of silver "so far compensated the diminution of the quantity of it contained in the same nominal sum, that the legislature did not think it worth while to attend to the circumstance."¹ As a matter of fact the legislature—or the kings—had "attended to the circumstance" by devaluation of the coins to prevent a fall in the price level. This mediaeval currency management was, of course, by successive reductions in the silver content of the coins. Historians have called it debasement of the coinage and condemned it as dishonest; we now call it devaluation—and some of us still condemn it as dishonest.

II

Since the invention of bank currency, monetary management has not been so simple. So long as money consisted entirely of coins, it was easily controlled or managed; with the quantitative factor made up largely of bank currency and deposits, and a varying and uncertain velocity of circulation, monetary management has

¹ *Wealth of Nations*, Book I, Chap. XI, Pt. III. (Modern Library Edition, p. 179.)

become more difficult. Early in the eighteenth century, Bishop Berkeley, seeing the periodic breakdown of the bank currency and the popular suffering from price fluctuations, proposed a system of managed currency. He insisted that all money should be issued by the government, that it consist of inconvertible paper, and that the issue be so regulated as to maintain a stable price level. The early history of the British currency thus shows two modern devices for management and control of prices: a succession of devaluations that did maintain a stable price level for 200 years; and, 200 years ago, Bishop Berkeley's proposal for a managed paper currency.²

The classical economists did not think of money as a tool for artificial control of economic activity, but merely as a mechanism to facilitate trade. The frequently quoted passage from John Stuart Mill expresses this view:—"There cannot, in short, be intrinsically a more insignificant thing, in the economy of society, than money; except in the character of a contrivance for saving time and labour . . . and like many other kinds of machinery, it only exerts a distinct and independent influence of its own when it gets out of order."³ In fact the classical economists did not admit the necessity for any artificial control of economic life, and did not design any remedies for periodic breakdowns such as the booms and slumps of the trade cycle. Classical theory proclaimed the economics of equilibrium, and showed how any change in demand or supply or price would set into operation its own correctives, and how equilibrium would be re-established by the automatic forces of free competition. This theory had no place for business cycles or monetary management, because a trade cycle is a breakdown of the equilibrium, which is impossible under classical theory.

The business cycle, however, has appeared, with its periodic dislocation of our whole economic life; and its effects have been intensified in recent years with the coming of large scale production, monopolistic competition, and greater rigidities of price and wage structures. It has remained for recent students to supple-

² C. Hollis, *The Two Nations*, Chap. I, V. This book is an interesting but unorthodox interpretation of English history in terms of monetary management.

³ *Principles of Political Economy*, Book III, Chap. VII, Sec. 3.

ment the classical theories with a treatment of the facts and explanations of business cycles. At the same time that the cycle was being analyzed we discovered the great powers of central banks to control the quantity of money, the rate of interest and the volume of investment. Out of this has grown the hope of controlling the business cycle, of stabilizing the price level, and of relieving or preventing periodic booms and depressions.

These hopes have not yet been realized, in spite of a great expansion in the mechanism and power of credit control by central banks and by the governments. The theory that stabilization of the price level would prevent the generation of crises, and that expansion of credit and lowering of interest rates would relieve a depression, has been generally accepted and very widely applied in the post-war years. Many people are now questioning the adequacy and the validity of these measures, and are proposing a new diagnosis of the sources of dislocation in the trade cycle.

III

This paper does not attempt to discuss the various theories of the generation of business cycles. It undertakes merely to present some of the sharply contrasting and conflicting explanations, as shown in policies proposed for dealing with depressions. The two conflicting theories might be called those in favor of expansion as a remedy for depression and those in favor of deflation as a remedy. John Strachey points this conflict under the two titles of "Not Enough Money" and "Too Much Money."⁴ Those who believe that depression is caused by price deflation, "Not Enough Money," would expand credit and raise prices as a remedy; while those who believe that crisis and depression are generated by credit expansion, "Too Much Money," would oppose monetary expansion, and in depression would allow prices and costs to fall. These two schools of thought may be called expansionist and deflationist.

Some of the earliest criticisms of the classical economists were directed against their belief in the natural equilibrium and automatic correctives, and their denial of the need for governmental intervention. Sismondi was one of the first critics of the classical

⁴ *The Nature of the Capitalist Crisis*, Chaps. II-V. Strachey writes as a socialist economist, and considers all our theories inadequate and all our policies futile.

economists, and one of the first to explain a theory of economic crises, and to advocate governmental intervention. He explained or foreshadowed the theories of over-savings and inadequate consumer income.⁵ Malthus, observing the conditions of widespread unemployment and falling prices after the close of the Napoleonic Wars, recommended increased government spending on public works to provide employment.⁶ On the other hand, Ricardo, trusting more to automatic correctives, advocated a reduction of wages and of government expenditures and taxes, as a means of increasing the profit margin and of enabling the employers to take up the unemployed at lower wages and lower costs. This points to the conflict, more than a hundred years ago, between the inflation remedy and the deflation remedy.

The general theory of expansion as a remedy for depression is familiar and needs no explanation. It has been accepted almost as a truism that the fundamental aim of monetary policy should be to maintain a stable price level, and that in depression, interest rates should be lowered and credit expanded. Fisher's "debt-deflation" theory of depression gives support to this policy. Hobson would provide more money to offset excessive savings; Fisher and others to offset increased production; Keynes to reduce the interest rate and restore the equilibrium of savings and investment. Keynes suggests that this policy, when necessary in extreme depression, should be continued to the uttermost limits;⁷ that is, until interest rates have been forced down practically to zero, and until great excess bank reserves have been built up. His advice in this respect has been followed by the United States in recent years.

A considerable number of economists in recent years are denying the validity of the whole theory of price stabilization, and of fighting depression by expansion of credit, by injection of new money and by increase of consumers' income. Their policy would be almost directly the opposite of the expansionist policy so generally applied in this country and in England. Crises and depressions are always marked by the decline or disappearance of busi-

⁵ Mao-Lan Tuan, *Simonde de Sismondi as an Economist*, pp. 68-83.

⁶ *Principles of Political Economy*, Chap. VII, Sec. X.

⁷ *Treatise on Money*, Vol. II, pp. 369-374.

ness profits. Business men will venture upon expansion of production and re-employment of labor only if they see a prospect of business profits; therefore, revival from depression requires the restoration of profits to business men. The expansionist policy would restore profits by raising the price level; the deflationist policy by reducing costs. It is true that the reduction of interest rates advocated by the expansion policy would reduce the cost of capital; but this could be brought about only by credit and currency inflation, which would maintain or raise the price level. The deflationists would say that crises occur because we do follow the expansionist policy—because we do inject new money to offset savings or to offset production or to stabilize the price level; and that in depression the policy of raising prices and wages, of increasing consumers' purchasing power, and of bolstering up distressed business enterprises will prolong the depression, not relieve it.

Their general argument is that, while an increase of savings and capital expenditure will reduce the price level, it will at the same time reduce the costs of production, since the whole purpose of increased capital equipment is to reduce costs. If new money is injected to maintain prices when costs are falling, the result will be an inflation of profits and the generation of crisis and collapse. Lionel Robbins explains a depression as a decline in the raw material producing industries and a fall in the demand for capital goods. Demand for consumers' goods has become relatively too high; therefore, any artificial stimulation of consumers' purchasing power will aggravate an evil already existing.⁸ What is needed in depression is the restoration of business profits and a stimulation of the demand for producers' goods. This can be accomplished only by reducing the costs of production. Robbins thus follows Ricardo in finding the rigidity of wage structure a barrier to recovery, and in recommending a reduction of wages as a remedy for unemployment of both capital and labor.⁹

Friederich A. Hayek, by a somewhat more involved process of reasoning, reaches similar conclusions. He thinks that at any stage of the cycle the injection of new money that is not the result

⁸ *The Great Depression*, pp. 69, 70.

⁹ *Ibid*, pp. 185-189.

of previous savings will create an artificial demand, will distort the proportion between the demand for consumers' goods and producers' goods, and will break down the equilibrium and disrupt the organization of production.¹⁰ We can consume only what we have previously saved. In depression, "The granting of credits to consumers, which has been so strongly advocated as a cure for depression, would in fact have quite the contrary effect; a relative increase in the demand for consumers' goods could only make matters worse."¹¹ Artificial stimulation should not be applied in prosperity or in crisis or in depression. He thinks that: "... we may perhaps prevent a crisis by checking inflation in time, but that we can do nothing to get out of it before its natural end, once it has begun."¹²

An argument is also made against an elastic or managed currency. The only case in which money would be neutral—that is, not a force making for inflation or deflation—would be a currency of fixed, invariable quantity. Using monetary management to maintain price levels makes money exert an active influence; an elastic currency is an artificial force that disrupts and unbalances the economic equilibrium. It is also argued that any revival stimulated by the injection of more money will be temporary, and will degenerate into crisis and collapse unless progressively increasing doses of new money are continued.

Similarly Robbins and other deflationist economists maintain that the usual inflationary remedies for depression are doomed to failure. Robbins explains the deepening of the recent depression in part by the efforts to maintain prices and wage rates and corporation dividends, and to bolster up failing business enterprises.¹³ In all pre-war depressions the policy of central banks had been to provide funds for all solvent enterprises, but at high discount rates. Since that time the policy has been reversed, and we have attempted to prevent liquidation, to maintain wage rates and prices, and to protect all distressed business ventures. Pre-war depressions permitted liquidation and reduction of costs with

¹⁰ *Prices and Production*, Lecture III, pp. 69-100.

¹¹ *Ibid.*, p. 97.

¹² *Ibid.*, p. 99.

¹³ *Op. cit.*, pp. 69-72.

prices. As Robbins says, "In the present depression we have changed all that. We eschew the sharp purge. We prefer the lingering disease."¹⁴

The deflationist policy would apply severe credit restrictions in times of business expansion, as near an approach as practicable to a fixed quantity of money and credit, in order to prevent the generation of crisis conditions. In depression it would allow prices to fall and would also allow wages and other costs to fall, and would allow the natural and necessary liquidation of insolvent business enterprises.

Both policies seek the restoration of business profits. One would restore profits by increasing prices, the other by reducing costs. Both policies would reduce the purchasing power of consumers and lead to greater concentration of wealth and income; one by raising prices more rapidly than wages, the other by reducing wages and other costs more rapidly than prices.

IV

The division of opinion indicated in this discussion raises the question asked at the beginning of this paper. Now that we have created powerful agencies and machinery for artificial control of money and credit, do we know what to do with them? A discussion of some practical applications of monetary policies in recent years will at least give more definite point to the question, though it may not provide a definite answer.

In the first place, this conflict of opinion serves to explain the division between the advocates of a managed paper currency and the advocates of a gold standard. The international gold standard tends to create an equilibrium of world prices, and makes impossible an artificial control or management of domestic prices. An increase of domestic prices will stimulate imports and expel gold, thus forcing a reduction of domestic prices; and if price inflation is continued, the outflow of gold will destroy the domestic gold standard. The gold standard is an instrument of international equilibrium, not of managed domestic prices. For this reason, when President Roosevelt decided to undertake the reflation of domestic prices, it was necessary for him first to abandon the gold standard. On the other hand, those who

¹⁴ *Ibid.*, p. 73.

believe that depression must work out its own correctives, allowing prices to fall, and wages and other costs to decline, would advocate the maintenance of the fixed gold standard. They believe that monetary influences making for inflation and crises can be avoided only by having a fixed volume of money; and the nearest approach to permanently fixed quantity of money is provided by the gold standard. At least the amount of price inflation possible under a gold standard is limited by the necessity of gold reserves; and under a free gold standard it is not possible for one country to accumulate a large excess of gold reserves. It is understood, of course, that since the World War the United States has not allowed the international gold standard to work, as we have used federal reserve credit and government policies to counteract and neutralize the effects of gold imports and gold exports. When changes in gold holdings are not allowed to exercise their normal and natural influence on domestic prices, then the international gold standard is not working, and there is no automatic corrective to accumulation of gold in one country.

Critics of the price stabilization theory point to the experience of the United States with price stabilization in the 1920's. This theory is that if money is geared to production, the price level will be stabilized, and the generation of crises will be prevented. During the years from 1922 to 1929, we were applying this policy, and our commodity price level was stable;—and we then led the world into the greatest depression in history. We kept the price level stable while costs were falling, and thus created a period of actual inflation of profits, with all the consequences of overinvestment and speculation that traditionally lead to crises. These critics would also point to the rather indifferent success of reflation policy during the depression, and the lag of recovery in the United States behind recovery in many other countries.

If the deflationist theory is correct, then the whole public policy both in America and in Great Britain is wrong, and will lead to disaster and collapse. An artificial stimulation by injecting more money will cause temporary revival, lead to inflation, and then, when the additional and increasing doses of new money are stopped, to crisis and collapse. Efforts toward credit expansion were begun under President Hoover, and were redoubled

under President Roosevelt. Roosevelt's declaration of price policy was made under such dramatic circumstances at the London Economic Conference that it was heard around the world. An identical policy had, however, been announced by the British sterling countries before Roosevelt's declaration. The Macmillan Commission in 1931 emphasized the need for restoring the price level and stabilizing prices; the Ottawa Empire Conference in 1932 adopted a program of adherence to the new sterling standard and stated its objectives of raising the price level and of stabilizing prices; and a currency manifesto of the Empire delegates to the London Economic Conference reaffirmed the same policy. These objectives were identical with those announced by President Roosevelt in 1933. Both the United States and the British Commonwealths are committed to the policy of reflation and stabilization of prices.

Critics point out, however, that our policy is inconsistent and conflicting, since we are attempting to restore profits by raising the price level, while we attempt at the same time to increase costs by raising wages. Under the deflationist theory, this is a double crime.

It must be mentioned, however, that the criticism of the expansionist policy is not quite fair, so long as only the general price level is considered. The main objective of price reflation is to correct a dislocation that is always created by falling prices. Flexible prices, such as raw materials and farm products, fall rapidly, while inflexible or administered prices remain practically fixed, and production is reduced. Restoration or reflation of the general price level will increase rapidly the sensitive prices, which have fallen most, and thus tend to correct the price dislocation and restore the equilibrium; and this is the objective of price reflation policies.

V

We must notice, next, the conflict between public monetary policies and business policies. During the upward swing of recovery and prosperity, business men favor a credit policy of low rates and easy bank credit, and they will criticize severely and resist strenuously any restriction of credit while business and profits are expanding. A central bank is popular so long as it is

providing additional credit for business expansion; it becomes unpopular as soon as it begins to raise discount rates and restrict or withdraw credit. Any credit policy, therefore, that undertakes to prevent over-expansion or inflation will meet strong popular opposition. Such a period calls for rather severe credit restriction, but such restrictive policy has never been successful, because no central bank or government has ever had the courage to apply it in face of strong popular opposition.

In the period of depression, on the other hand, business opinion seems to favor the policy of deflation. The general opinion of leading business men is probably well expressed in resolutions adopted by the International Chamber of Commerce at their recent meeting in Paris. Resolutions adopted on October 21, 1938, rejected "the fallacy that artificially cheap money is necessary for business activity," and advocated an early restoration of the international gold standard. The resolutions add the further statement that, "Money rates should tell the truth regarding the actual situation as to the supply and demand of capital. By an adequate supply of capital is meant an abundant volume of true investors' savings and corporate savings."¹⁵

The natural reaction of business men to falling demand and declining prices is to use every possible means of reducing their costs, and they naturally attempt to reduce wages and other costs. They also recommend that government should adopt measures of economy, and reduce expenditures and reduce taxes. They attempt to restore profits or avoid losses by reducing costs. The natural remedy for depression works itself out by this process. The deflationist economists offer no remedy for depression except the natural remedy of letting the depression run its course. Does our long experimentation and our creation of elaborate mechanisms of credit control lead us to this dead end and a confession of helplessness?

This confusion and disagreement on theories and on practical policies cannot be reconciled or resolved by examining our experience with depressions and monetary policies in the past. All theories agree that the best method of avoiding depression is the prevention of inflation that generates crisis. Our one brief

¹⁵ *New York Times*, October 22, 1938.

experience with stabilization of commodity prices in the 1920's did not prevent inflation or crisis. This experience, however, need not be conclusive, because other world factors were involved, and because it included a period of deliberate credit expansion in 1927. The crisis and severe depression of the 1890's came after a long period of falling prices. A fixed quantity of money has never been actually tried, at least since the invention of bank money and credit management; and a severe credit restriction in the early stages of business expansion has never been actually applied, and is difficult if not impossible to apply in face of popular opposition.

As remedy for depression and aid to recovery most countries have undertaken credit expansion and some measure of inflation. In some countries, such as Sweden and probably England, where monetary expansion has been used in connection with other co-ordinated measures of economic planning, some measure of success has been achieved. In this country the success of monetary management in depression has been limited and questionable. The deflationist remedy for depression—which is practically the *laissez-faire* remedy—has not been allowed to operate in our recent depression. We know at least that earlier depressions, without monetary management to prevent the natural deflation, have been quick and severe in process of liquidation, and usually short in duration. The laboratory of experience offers no certain confirmation or refutation of our theories.

VI

In conclusion, there is reason for serious doubt on two other questions that are fundamental; first, some doubt of the validity of the quantity theory of money, at least as a basis of prediction and control; and secondly, a question whether we can expect monetary remedies to be effective under the new economy of inflexible prices and wages.

There seems to be little doubt that monetary and credit restrictions could be used to limit or prevent an undue advance in the general price level, if such restriction could be practically and firmly applied. We seem to have learned, however, that it is not possible to force an increase in the price level and in business

activity in a period of depression and business stagnation. Increased volume of money and bank reserves can have no influence on prices until the money or credit moves into the market and is used for purchasing goods. The increased money merely permits or makes possible a higher price level and greater business activity, but does not necessarily or automatically force a higher price level. The prospect of business profits must be present, to induce business men to venture into borrowing and spending. In the equation of exchange the factor of velocity is one that is unpredictable and uncontrollable.

Finally, all theories of monetary control assume an economy regulated by free competition, in which prices and wages are flexible and sensitive to every change in demand and supply, and in which new business enterprises are easily started and old ones easily abandoned. Our monetary theories, like most of our economic theories, assume a competitive society of small industries, and a flexibility that no longer exists in the new economy. Since a large proportion of prices today are inflexible administered prices, and since wages are even more rigid than prices, the natural remedies or correctives for dislocation of prices and demand are not allowed to work. Furthermore, industry in all countries is subject to many governmental controls and trade restrictions that prevent the automatic balances of a free competitive society. Currency management is still in the experimental stage. Before it can become an effective and a certain agency for control, we shall need to know more of the underlying causes of the economic dislocations of the business cycle, and must have clearer objectives. We have created powerful mechanisms for controlling currency and credit, and all countries are now committed to some form or some measure of monetary management. If credit restriction is necessary to prevent the generation of crises, we still have no measure for the amount of restriction necessary, nor for the proper timing of this restriction; and we have not had courage to apply severe restrictions when business seemed prosperous. The expansion remedy for depression has brought at best no more than indifferent success; and the theory supporting this remedy is now disputed by many students of the trade cycle.

Measures for controlling the trade cycle and remedies for depression must be sought in wider fields than those of monetary and credit control. Further experience may show us that currency management can be made an important part of a coordinated scheme of economic planning, but that it cannot be the sole instrument for controlling business activity.

THE PRESENT STATUS OF LABOR UNIONS IN THE SOUTH

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Trade unions in the South¹ are in various stages of development. Many have been organized for years, their existence is accepted, collective bargaining followed by agreement is the rule. In some instances, indeed, the union-management cooperation recently described by the Steel Workers' Organizing Committee² may be at hand. Such well established unions furnish detailed membership data readily and exactly; though where such unions are still operating under the leadership of the formative period the early policy of caution and secrecy sometimes continues to prevail. Where unions are going through critical periods of their existence, and are fighting for members and for recognition, however, "reputation for strength or weakness is considered to count heavily with prospective members, the government, and the public."³ Data from unions in this stage of development are difficult to obtain for publication and, where given, must be treated with some skepticism. The fact that a considerable amount of information was furnished for this paper is in itself an indication of the growth and development of trade unionism in the South during this decade.

I

Professor Schwenning called attention in December, 1931 to the "Herculean task facing organizers"⁴ in the textile industry, but statistics of membership and other indices of activity now indicate

¹ The South here includes: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee and Virginia.

² *Production Problems*, Publication No. 2 (1938).

³ Leo Wolman, *Ebb and Flow in Trade Unionism*, p. 5.

⁴ G. T. Schwenning, "Prospects of Southern Textile Unionism," *The Journal of Political Economy*, December, 1931.

that leaders in the trade union movement are making a vigorous and successful effort to clean up what to them must have seemed an Augean stable. The Textile Workers' Organizing Committee claims approximately 100,000 members in the South. According to most recent methods of organizing, these 100,000 will not be paying members until the union has gained a contract with the company. To date, very few contracts (approximately 25) have been signed. It should not be assumed, however, that the labor movement in textiles is inactive. The members are militantly awaiting a chance to obtain a contract and start paying dues. Between September, 1937 and September, 1938 the T. W. O. C. in the South initiated 41 complaint proceedings under the National Labor Relations Act charging violations of various parts of Section 8 of that law. During the same period, the T. W. O. C. was on the ballot of about 40 elections and polled a vote as representative of 15,000 workers. In the fall of 1937 a furniture factory in Virginia was organized by the T. W. O. C. and an election was won in that plant. The discrepancy between union claims and election returns is not as important as appears on the surface. Relatively few elections have been held and comparatively few complaints have been brought before the Labor Board. In a conversation one of the mediators of the Department of Labor ventured the opinion that the union was much stronger than would appear from mere election reports. The winning of an election by the T. W. O. C. in one community has a salutary effect upon other mills in the vicinity. Admittedly, the Textile Workers' Organizing Committee still has a long way to go before the Southern textile industry is thoroughly organized. The stimulus of the Wagner Act and the organizing methods involving no dues or initiation fees have made membership figures large. The problem now before the T. W. O. C. is to educate the textile workers in the long hard grind of successful unionism. Most large employers still retain open shops, but, on the other hand, they no longer retain shops closed to union members. (See Table I.)

Other branches of the textile industry have likewise made progress in the South. This is evidenced by their activity in bringing complaints. The American Federation of Hosiery Workers has

TABLE I

UNIONS IN THE SOUTH FILING COMPLAINTS WITH THE NATIONAL LABOR RELATIONS BOARD
UNDER SECTION 8 OF THE LABOR RELATIONS ACT, SEPTEMBER, 1937-OCTOBER, 1938*

UNIONS FILING COMPLAINTS	NUMBER OF COMPLAINTS FILED
I. Mining	
United Mine Workers of America	20
International Union of Mine, Mill, and Smelter Workers	3
Quarry Workers' International Union of North America	1
Oil Workers International Union	1
International Association of Oil Field, Gas Wells and Refining Workers of America	2
II. Manufacturing	
1. Heavy or durable goods	
International Association of Machinists	1
International Molders' Union of North America	4
Stove Mounters' International Union of North America	1
United Furniture Workers	Elections
United Veneer, Box and Barrel Workers	3
Steel Workers Organizing Committee	2
Industrial Union of Marine and Shipbuilding Workers of America	2
United Brick and Clay Workers of America	1
Metal Bed Workers Federal Union	1
2. Light and consumable goods	
Tobacco Workers Organizing Committee	1
Tobacco Workers Union	1
Bakery and Confectionery Workers' International Union of America	2
United Rubber Workers of America	1
United Meat Cutters and Butcher Workmen of North Amer- ica	1
Optical Workers Union	1
International Brotherhood of Paper Makers	1
International Brotherhood of Pulp, Sulphite, and Paper Mill Workers	1
Textile Workers Organizing Committee and United Textile Workers	41
American Federation of Hosiery Workers	13
Amalgamated Clothing Workers	5
International Ladies Garment Workers	3
United Garment Workers	2
Distillery Workers Union	1
Envelope Workers' Union	1

* Cf., *Labor Relations Report*, *passim*.

TABLE I—*Concluded*

UNIONS FILING COMPLAINTS	NUMBER OF COMPLAINTS FILED
III. Printing	
International Printing Pressmen and Assistants' Union of North America	3
International Brotherhood of Bookbinders	2
IV. Building and Construction	
United Brotherhood of Electrical Workers	4
United Brotherhood of Carpenters and Joiners	4
International Association of Bridge and Structural Iron Workers ..	1
Granite Cutters' International Union	5
V. Transportation and Communication	
Inland Boatmen's Union	1
National Maritime Union	3
Transport Workers Union	1
Amalgamated Association of Street and Electric Railway and Motor Coach Employees	3
American Radio Telegraphists' Association	1
International Seamen's Union	1
National Organization of Masters, Mates, and Pilots of America	1
International Brotherhood of Teamsters, Chauffeurs, Stablemen and Helpers	1
United Dock and Fruit Workers	1
VI. Service and Professional	
American Newspaper Guild	2
Federation of Architects, Engineers, Chemists, and Technicians ...	1
VII. Other—Special	
Individuals, Federal labor unions, C. I. O., A. F. of L. or local central organizations	14

not divulged its Southern membership figures but has, during the past years, brought complaints against 13 employers. The International Ladies Garment Workers of America, in February, 1938, claimed only 678 members. During the year, however, they brought complaints against three plants. The United Garment Workers have 10 shops in the South with which they have union label contracts. Complaints have been filed in two cases. Figures for the Amalgamated Clothing Workers are approximations based on a survey map published in the *Advance*.⁸ The union has approximately 16 locals and 4,500 members. Its record of complaints is five.

⁸ May, 1938.

Tobacco, another major industry of the South, is partially organized, but the extent of the organization cannot be determined. One union official (of a different union, to be sure) gave 7,000 as the number of Southern members. The several brands of cigarettes carrying the union label are produced by union workers in closed shops. Both Liggett & Myers and the American Tobacco Company have agreements with the Tobacco Workers' International Union.⁶ One reference to a complaint filed by the Tobacco Workers' Union has been found, and a Tobacco Workers' Organizing Committee of the C. I. O. lodged one complaint during the year.

Dr. Mitchell wrote in January, 1931: "No attack has yet been made on the Birmingham metal industries, and the coal fields are being avoided until unionism in that industry sets its house in order."⁷ Times have changed. The Steel Workers' Organizing Committee now has contracts with 23 plants in the South hiring an aggregate of over 15,000 men. About 11,500 of these workers are union members. The United Mine Workers claim over 70,000 members. A great achievement of the United Mine Workers has been the recent signing of an agreement with the Harlan County, Kentucky, mine operators. The miners have filed 20 complaints, while the Steel Workers' Organizing Committee has brought two complaints.

The Building Trades have been organized for some time in the South and their large membership is readily given by the central office. The carpenters alone claim over 22,000 Southern members; the plumbers, 3,000; the bricklayers and masons, 9,000; the electrical workers, 7,500. Both the carpenters and the electrical workers brought complaints during the year.

Another large group, the railroad workers, are well organized. The Brotherhoods are among the oldest labor unions in the United States and, during the years, a large group of men in the Southern field has been organized.

Little union progress has been made in the large furniture industry in the South. Apparently both the United Brotherhood of Carpenters and Joiners and the new C. I. O. United Furniture

⁶ A. F. of L., *News Letter*, May 15 and May 22, 1937.

⁷ G. S. Mitchell, "Organization of Labor in the South," *The Annals*, January, 1931, p. 186

TABLE
UNION MEMBERSHIP IN

	ALA.	ARK.	FLA.
I. Mining and Extractive			
a. United Mine Workers of America (1)	22,000	6,000	.....
II. Manufacturing			
1. Heavy or durable goods			
a. Brotherhood of Railway Carmen (2)	867	771	990
b. International Association of Machinists (3)	1,400	1,000	1,200
c. International Union of Aluminum Workers of America (4)			
d. Industrial Union of Marine and Shipbuilding Workers of America (5)	1,500		
e. United Furniture Workers of America (6)		2,100	
f. International Molders' Union of North America (7)			
g. Amalgamated Association of Iron Steel and Tin Workers (8)	13 contracts, 12,525 workers in plants		
2. Non-Durable and Consumers' Goods			
a. Bakery and Confectionary Workers' International Union of America (9)		239	
b. United Brewery and Soft Drink Workers of America (10)			370
c. Textile Workers organizing Committee (11)			
d. Amalgamated Clothing Workers of America (12)			
e. International Ladies Garment Workers Union (13)			
f. United Garment Workers of America (14)			
g. International Typographical Union of America (15)	423	279	728
h. International Printing Pressmen of North America (16)	5 locals	2 locals	9 locals
III. Building and Construction			
a. Bricklayers, Masons, and Plasterers' International Union of America (17)	940	166	1,882
b. International Association of Bridge and Structural Iron Workers (18)	399	4	277
c. United Brotherhood of Carpenters and Joiners (19)	2,004	1,966	4,439
d. International Brotherhood of Electrical Workers (20)	874	187	1,014
e. United Association of Journeymen Plumbers and Steam Fitters (21)	242	68	612

STATUS OF LABOR UNIONS IN THE SOUTH

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II

THE SOUTH, OCTOBER, 1938

GA.	KY.	LA.	MISS.	N. C.	S. C.	TENN.	VA.	TOTAL
200	38,000	16,000	82,200
971	930	535	625	677	516	1,195	1,419	9,496
1,500	1,800	1,200	550	1,500	750	2,000	3,500	16,400
.....	.....	.....	.....	950	.....	5,000	.....	5,950
.....	.....	600	.....	.....	.....	.....	Still in organizing stage	2,100
.....	.....	.....	.....	400	.....	.....	400	2,900
.....	.....	.....	.....	.....	.....	.....	.....	36 locals
1 contract, 400 workers in plant	.....	.....	.....	.....	.....	8 contracts, 3,555 workers in plant	1 contract, 125 workers in plant	36 locals, 23 contracts
354	219	776	30	.....	.....	373	254	2,245
101	550	722	.....	30	.....	270	128	2,171
.....	.....	.....	.....	.....	.....	.....	.....	100,000
.....	.....	.....	.....	.....	.....	.....	.....	16 locals; 4,500 members
570	.....	.....	.....	98	.....	.....	.....	668
.....	.....	.....	.....	.....	.....	.....	.....	10 Union label shops
610	428	384	90	399	189	808	494	4,832
9 locals	4 locals	5 locals	2 locals	7 locals	2 locals	13 locals	9 locals	.....
746	1,097	904	355	614	318	1,036	977	9,036
172	139	319	138	17	.....	792	196	2,453
922	2,416	2,520	803	770	290	2,739	1,408	20,277
1,085	641	747	219	434	171	1,265	909	7,546
302	346	356	54	260	83	391	282	2,996

TABLE II

	ALA.	ARK.	FLA.
IV. Transportation and Communication			
a. Brotherhood of Locomotive Firemen and Enginemen (22)	696	870	487
b. Brotherhood of Railway and Steamship Clerks (23)			
c. Order of Railroad Telegraphers (24)	599	585	583
d. Order of Railway Conductors (25)	540	365	609
e. Brotherhood of Railway Trainmen (26)	1,480	1,230	990
f. Amalgamated Association of Street and Electric Railway and Motor Coach Employees of America (27)	858	200	
g. National Maritime Union (28)			
V. Service			
a. American Newspaper Guild (29)	17		14
b. American Federation of Musicians (30)	268	200	996

- (1) Letter from District Headquarters, August 8, 1938. Figures said to be approximate.
 (2) Letter from General Vice-President, October 13, 1938.
 (3) Letter from Secretary-Treasurer, September 9, 1938. Figures said to be approximate.
 (4) Letter from Secretary-Treasurer, August 29, 1938. Figures said to be approximate.
 (5) Letter from Secretary-Treasurer, October 10, 1938. Figures said to be approximate.
 (6) Letter from President, October 13, 1938. Figures said to be approximate.
 (7) As presented in each issue of *Journal*.
 (8) *Steel Labor*, September 23, 1938.
 (9) Letter from Corresponding Secretary, October 10, 1938.
 (10) Letter from Corresponding Secretary, October 10, 1938.
 (11) Exclusive of Hosiery Workers. Figures given by states in letter from Research Director but request made that figures not be released.
 (12) Approximations of author based on census map published in the *Advance*, May 1938.
 (13) From official census.
 (14) From list of union label shops printed in each issue of the *Journal* of the Union.
 (15) From 1938 official Register.
 (16) Official Directory, 1938. Actual membership figures withheld as matter of policy.
 (17) Letter from Secretary, August 17, 1938.
 (18) Letter from Secretary, October 12, 1938.
 (19) Letter from Secretary, October 10, 1938.
 (20) Letter from Research Department, August 23, 1938.

Workers are now active. The latter has succeeded in obtaining nine closed shop contracts in Arkansas covering 2,100 workers. It also has locals in Roanoke, High Point, Thomasville and Chattanooga, but these as yet include a very small percentage of the furniture workers in the South.

Between September, 1937, and September, 1938, 42 different unions brought complaints against Southern employers and Southern workers voted in 88 different elections for the selection of representatives. Table II sheds additional light on the extent of trade unionism in the South today (1938). These statistics certainly warrant the conclusion that unionism in the South is no longer an insignificant movement confined to a few centers.

—Concluded

GA.	KY.	LA.	MISS.	N. C.	S. C.	TENN.	VA.	TOTAL
770	1,394	679	372	588	293	1,368	1,298	8,815
								16,000
706	742	490	514	586	373	626	886	6,690
805	867	349	447	548	356	890	552	6,328
1,750	1,220	1,070	700	1,510	825	2,725	2,465	15,965
964	358	619	24	134	45	788	265	4,255
								30,000
11				24		325		391
353	491	528	71	443	152	547	627	4,676

(21) Letter from Secretary, August 17, 1938.

(22) Letter from Secretary-Treasurer, October 13, 1938.

(23) Actual figures given but withheld at request of union.

(24) Letter from President, August 19, 1938.

(25) Letter from President, October 11, 1938.

(26) Letter from Secretary-Treasurer, October 11, 1938.

(27) Letter from *Journal* editor, August 25, 1938.

(28) Letter from Secretary of the Atlantic District Committee, October 13, 1938. Figures said to be approximate.

(29) Letter from Executive Vice-President, August 17, 1938.

(30) Letter from Secretary, September 6, 1938.

In addition to the above, membership figures were requested from the following international unions which presumably have considerable membership in the South. Some of these requests were not answered and in some cases the officials of the union explained that releasing membership figures was not in accordance with union policy. The unions making this reply are: (a) International Union of Tobacco Workers; (b) International Cigar Makers' Union; (c) Cannery, Agricultural, Packing and Allied Workers; (d) American Federation of Hosiery Workers; (e) International Hod-Carriers, Building and Common Laborers' Union; (f) Brotherhood of Painters, Decorators and Paper-hangers; (g) Brotherhood of Locomotive Engineers; (h) International Brotherhood of Teamsters, Chauffeurs, Stablemen and Helpers of America.

II

The present activity of labor in the South can only be visualized as part of the larger labor movement at present under way in this country. Strictly speaking, no labor movement, with the exception, perhaps, of those very few trades whose product is both produced and sold locally, can afford to be a regional movement. It is beside the point, therefore, to ask whether the present union activity is instigated by Southerners. Modern transportation facilities carry the products of any community to all parts of the nation. That fact means that labor costs in one plant cannot be much greater than labor costs in another. If shirts can be manufactured cheaper in North Carolina than in Pennsylvania because

North Carolina labor is exploited, then a Pennsylvania union of shirt makers must attempt to organize the South as a measure of self-protection. Students of labor problems know that a union, to be effective, must cover the entire area of competitive production. That is the reason for national unions.

This is not entirely a regional problem nor are the factors mentioned purely Southern. Several points which certainly have brought considerable activity to the Southern labor movement, however, warrant special consideration. The first of these is the National Labor Relations Act. That law attempts to protect the rights of workers to self-organization and collective bargaining. Among its provisions is one prohibiting an employer from interfering with the union activities of his workers. That section has undoubtedly been of extreme importance in the organizing activities in the South. Since the Supreme Court upheld the Labor Relations Act, employers in the South, as elsewhere, have been careful to engage in no obvious discrimination because of union membership. Confident of protection in the exercise of their rights workers can now attend labor union meetings, can wear union buttons and can otherwise make known to the world that they are union members without fear of discharge, since the National Labor Relations Board will order the reinstatement of workers obviously dismissed for union activity. The question of whether or not to join a union can now be debated on its merits.

Another section of the Wagner Act condemns refusal to bargain collectively as an unfair labor practice. At what point an employer refuses to bargain is not yet entirely clear, but the law obviously assumes that collective bargaining is the proper way to conduct labor relations. This was the implication drawn by Chief Justice Hughes in the *Jones & Laughlin Case*,⁸ and that point has not been lost either on the Southern organizer or on the Southern worker. In other words, the Southern worker is being shown that a union is more than a temporary weapon of rebellion, that it is also a very normal method of carrying on simple negotiations through organization and collective bargaining. Industrial autocracy in the South is now being attacked, not occasionally

⁸ 301 U. S. 1 (1936). C. E. Hughes delivered the opinion of the court.

as in 1929 when the stretch-out system revolts took place, but as a matter of principle.

It is, therefore, reasonable to assume that these sections of the Wagner Act, by stimulating organization for collective bargaining and by protecting the workers in their organizing campaigns, have brought considerable union activity to the South. Other factors have served as additional stimuli.

All friends of labor have been greatly disturbed by the inter-factional disputes between the A. F. of L. and the C. I. O. Apparently, however, this competition has caused organizers to redouble their efforts and the South is a fertile field for such activity. In many parts of the nation unions must proselyte for members. In many Southern industries, however, the workers can be organized by the first group to arrive. Thus union rivalry has brought organizers to some hitherto neglected Southern industries. Who, for instance, will organize the long unorganized furniture industry in Virginia, North Carolina, Tennessee and Arkansas? Will it be the United Brotherhood of Carpenters and Joiners of the A. F. of L. or the United Furniture Workers of the C. I. O.? Whoever signs up the members, the net result will no doubt be an organized industry. Apparently dissatisfied with the speed or results of the Textile Workers' Organizing Committee, the American Federation of Labor has started organizing textile workers into federal unions. This industry will, probably, be organized more rapidly because of this union competition.

Another aspect of the "war" between the A. F. of L. and the C. I. O. will, no doubt, be the alacrity with which employers will see what a grand organization the A. F. of L. is after all. Employers, like most people, would "rather bear those ills we have than fly to others that we know not of." The C. I. O. is a comparatively unknown quantity whereas the A. F. of L. is more familiar and is generally regarded by employers as less obnoxious. Thus, even as Southern employers in 1929 prayed for deliverance from the communist union in Gastonia and admitted that the A. F. of L., the lesser of two evils, was really a good union, so now employers have been reported as saying that it is the C. I. O. which they oppose, not their suddenly recognized friend, the A. F. of L. It is very probable that the A. F. of L. would not be

so cordially welcomed if its affiliates, even under the same management, were the only unions to be considered.

Recent labor history in the South has been modified by W. P. A. policies. This federal agency is designed to provide work for the indigent and, as a matter of policy, aid has not been withheld even though a strike caused the indigency. Since no detailed study of W. P. A. activities during all strikes has been made, the importance of this factor cannot be estimated. In so far as striking workers are able to obtain W. P. A. jobs, however, their withholding power is increased and they are better able to enforce their demands against their employers.

III

The factors thus far discussed have certainly had their effect upon the Southern labor movement, but the same factors have affected the labor movement of the nation as well. Several considerations, however, are playing their part in the present status of the Southern labor unions alone. Southern workers are apparently beginning to realize that social intercourse need not necessarily follow economic cooperation with Negroes and that unions are interested only in equality of wages and working conditions. In 1936 Dr. Mitchell gave an excellent summary of this movement in the South.⁹ He stressed particularly the cooperation of the races for economic betterment in the coal and iron industries. An additional encouraging sign of that same cooperation is the fact that in a city like Durham, N. C., leaders in textile locals attend inter-racial meetings along with such old-line unionists as building tradesmen. Each of the large tobacco plants has Negro locals, and the City Central Labor Union welcomes two Negro delegates. The Steel Workers' Organizing Committee has gone still further. Approximately 50 per cent of their members are Negro and in all instances the Negroes meet in the same lodge with the whites. Negroes sit on one side of the hall while the whites sit on the other. Summarizing the situation Mr. Beddow writes:

In the past corporations have used the negro question to keep wages of white men down. This has been one of our major problems. If a con-

⁹ G. S. Mitchell, "The Negro in Southern Trade Unionism," *The Southern Economic Journal*, January, 1936.

tract was signed making a distinction in the pay of a man because of his color, naturally the colored man got more of the work, the white man getting nothing. The next year when the contract came up again the same thing was gone through. Again wages were cut. We are fast eliminating this condition. At first it was hard to do but now the southern white worker sees how he has been made a play thing in the past and is going down the line side by side with the negro worker. He realizes that if they have to work side by side in the mill, there is no equality question if they sit separately but in the same hall.¹⁰

The problem of the run-away mill is an ever-present one in the South. Chambers of Commerce have learned no lessons from past experience and, in some states, are still arranging for factory space and tax exemption in order to lure industries to their cities. Industries needing such subsidies are not worth having, but the fact remains that local people invest in these sweatshops and are likely to join with the management in resisting organization. The company has only to threaten to move again to drive some local patriots to vigilante depths in their attempts to rid the city of "outside agitators." This has happened in North Carolina as well as in Mississippi¹¹ and will continue to happen until Southern business men realize that the idea that sweatshops are good for a community is an economic fallacy.

The long arm of the federal government operating through the Wagner Act, on the other hand, gives union organizers the same opportunity to present their positions in Mississippi as in Maine. Vigilance societies have clashed with the Labor Board and will do so again. More recently, the federal wage and hour law has provided for minimum wages and maximum hours even in those states having a minimum of protective labor legislation. If the wage and hour bill passes constitutional hurdles and the Labor Relations Act escapes emasculation by the next Congress, there will soon be little to be gained in labor costs by moving from Pennsylvania to North Carolina or from Alabama to Mississippi as a knitting mill did recently. The respite from one union will be brief because the formation of a new one will be a matter of time.

¹⁰ Noel R. Beddow, In a letter dated October 15, 1938 in reply to an inquiry as to the policy of the S. W. O. C.

¹¹ In Tupelo, Miss. and in Morehead, N. C.

Still another factor of importance in the current development of trade unionism in the South is the invasion of the quality goods field by Southern manufacturers. There is, in the South, a large surplus of unskilled labor and as long as manufacturers turned out an inferior grade of product, they enjoyed a well-nigh inexhaustible labor supply. Under such conditions unionization could make scant progress.¹² When the mills began to manufacture first-class silk hosiery instead of cotton stockings, for example, the labor surplus diminished. A quality product requires skilled workers and such trained workers are not so abundant in the rural South. Technological development has curtailed the labor supply to such an extent that strike threats are no longer blank cartridges but real ammunition in labor's war. There is still another concomitant of this technological progress. The increased value of their output will enable Southern manufacturers to pay higher wages. In other words, unions now have something to bargain for and the workers can expect to profit by labor organization. While the extent of this shift to the manufacture of quality goods is not statistically certain, there are indications that this is the trend in the furniture and in the textile industries. Seventeen per cent of the nation's hosiery knitting frames are already located in the South and a higher grade of textiles is already being produced.¹³ This trend will accelerate trade unionism both by facilitating organization through a curtailment of the labor supply and by increasing the "jackpot" to be won.

The history of Southern trade unionism has not yet been published. Study of the statistics for the present, however, and review of various factors affecting those figures indicate that labor unions in the South have reached a new high within the past two years. If this new ground can be maintained, industrial autocracy and industrial paternalism will give way to true collective bargaining in which representatives of the workers sit down with representative of management to attempt amicable solutions of the labor problems.

¹² See Schwenning, *op. cit.*

¹³ *Labor Relations Reports*, Vol. 2, No. 3, March, 1938.

REGULATION OF AGRICULTURAL WAGES IN ENGLAND*

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Agriculture is today America's outstanding low wage industry. The more than three million workers employed on the farms of this country as hired hands share none of the advantages of unionism and few of the safeguards thrown around industrial workers by social legislation. Not only have agricultural workers been ignored by the trade-union movement but they have been almost entirely exempted by the New Deal legislation in making provisions for various labor groups. The NIRA specifically excluded agricultural labor from its provisions; the AAA did not extend its benefits to farm labor; the Social Security Act makes no provision for this group of workers; and the Fair Labor Standards Act of 1938 likewise does not apply to agricultural workers. As a result, farm labor is conspicuous as the one group of workers afforded little protection by federal legislation despite its long hours, low wages, and a standard of living far below that of the average industrial worker. While there are a number of serious problems that must be solved before adequate relief can be given to this neglected class, their condition cannot long be ignored.¹

In many European countries organization among agricultural laborers has made considerable progress and many of their unions are associated through the International Landworkers' Federation. In several countries the organizations are strong enough not only to secure agreements through collective bargaining, but to draw upon governmental authority to some extent for insuring observance of agreements.²

* This article is based on material collected in connection with a project of the Institute for Research in the Social Sciences, University of Virginia.

¹ For a suggested program to help our farm labor see an article by Lief Dahl in the *American Federationist*, February, 1937, pp. 137-45.

² International Landworkers' Federation (Utrecht, Holland). Bulletin, September and October, 1935, Nos. 2 and 3.

In a few of the European countries, minimum wages for agricultural workers are fixed by law. Since the agricultural minimum wage law of England and Wales, in effect since 1924, is the most comprehensive of its kind in Europe and perhaps in the world, this article will be confined to a discussion of the provisions and results of English legislation.³

I

England's first experience with the regulation of wages for agricultural labor came about as the result of the passage of the Corn Production Act of 1917. Prior to that time agricultural wages in England and Wales were, in the main, a matter for individual agreement between employer and worker. Agricultural workers generally were not organized in trade unions, although two such unions existed which catered to rural workers. While in a few counties these unions had a considerable membership, in the country as a whole neither union could claim as members any substantial proportion of the agricultural workers.

The Corn Production Act of 1917 provided for a threefold policy of guaranteed prices for agricultural products, wages regulation, and controlled production. In fixing wages, the Agricultural Wages Board was given the sole responsibility. To assist it in its work, the Agricultural Wages Board, under powers conferred upon it by the act, appointed District Wages Committees throughout England and Wales. The right of fixing minimum rates of wages was, however, vested solely in the board itself, the District Wage Committees acting in a purely advisory capacity.

The Agricultural Wages Board sought to increase the general minimum rates in proportion to increases in living costs. The minimum rate of wages for adult male farm hands from May to October, 1917, was 30s per week, while the minimum hourly rate for adult females was 5d. By September, 1921, the minimum for adult men had been increased to 42s per week and that of adult females to 7d per hour.⁴

³ The system of wage fixing in effect in England and Wales since 1924 was extended to Scotland by a recent Act of Parliament. (1 Ed. W. 8 and 1 Geo. 6, chapter 3.) This legislation was recommended by a committee of inquiry which was appointed in 1936 by the Secretary of State for Scotland to study wages, hours, and working conditions of farm workers. *Ministry of Labour Gazette*, August, 1937, p. 297.

⁴ *The Ministry of Labour Gazette*, October, 1921, p. 522.

The Corn Production Act was repealed in 1921, with the result that the system of wage-fixing in agriculture came to an end on October 1, 1921. The Corn Production (Repeal) Act, however, empowered the Minister of Agriculture to take steps to secure the voluntary formation and continuance of Local Joint Conciliation Committees for the purpose of dealing with wages or hours or conditions of employment in agriculture. The Minister appointed 63 Conciliation Committees, which accomplished little during their existence. Any wage rates set by them could be enforced by civil proceedings only, and at the instance of an aggrieved workman. In actual practice very few agreements were made at all, and fewer still were submitted for confirmation by the Minister.⁵ The voluntary system was almost a complete failure and in 1922 there was considerable agitation in favor of either applying the Trade Boards system to agriculture or restoring the law which had been repealed.⁶

In March, 1923, the National Union of Agricultural Workers requested Parliament to apply the Trade Boards Acts to agriculture, but the government decided that the acts as drawn could not properly deal with this industry. The final result was the passage of the Agricultural Wages (Regulation) Act of 1924.⁷

The Act of 1924 combined features from both the 1917 and 1921 laws. It was based on the compulsory principle of the 1917 scheme, but followed the principle of the 1921 scheme in leaving to each locality the sole responsibility of determining the minimum rate for the area.⁸

As provided in the act the duties of the Local Wages Committees, the National Wages Board, and the Minister of Agriculture and

⁵ J. Hallsworth, *The Legal Minimum*, London, 1925, p. 14.

⁶ At the meeting of the Trade Union Congress in 1922 the following resolution was passed, "That this Congress, viewing with concern the present position of the Agricultural workers, calls upon the General Council in conjunction with the executive of the Labor Party, to prepare a Bill for the re-establishment of a Wages Board for Agriculture, and to undertake immediately a campaign with the object of arousing public opinion on this important question". 54th Annual Report, Trade Union Congress, 1922, p. 69.

⁷ 14 and 15 Geo. 5, Ch. 37.

⁸ The provision confining most of the power to local committees was the result of a compromise. The government wanted to give great powers to the National Agricultural Wages Board, but the farmers seriously objected. As a result, the powers of the National Board were limited to making orders so as to give statutory effect to decisions of local committees.

Fisheries are briefly as follows: The Agricultural Wages Committees are required to fix minimum rates of wages for all workers in agriculture, including the fixation of overtime rates; the definition of employment which is to be treated as overtime employment; the definition of benefits which may be reckoned as a part payment of minimum rates of wages in lieu of payments in cash; and the determination of exemptions from the minimum rates on account of physical injury or mental deficiency. The National Wage Board issues orders giving statutory effect to the decisions of Local Committees; takes charge in case of default in the operation of Local Wages Committees; is entrusted with the responsibility of seeing that the act operates everywhere; advises either Local Committees or the Minister on questions of labor and wages; and acts in an advisory capacity as a coordinating agency.⁹ The Minister of Agriculture and Fisheries is empowered to direct a committee to reconsider its decision; to constitute both the Wages Board and the Local Committees, and is also entrusted with the duty of enforcing compliance with the rates prescribed for each area.

It is apparent from the above statement that the Local Committees are given full powers in the matter of wage regulation. The act provides that, "In fixing minimum rates a Committee shall, so far as is practicable, secure for able-bodied men such wages as in the opinion of the Committee are adequate to promote efficiency and to enable a man in an ordinary case to maintain himself and his family in accordance with such standard of comfort as may be reasonable in relation to the nature of his occupation."

When a committee decides to fix, cancel, or vary any minimum rate it is required that 14 days' notice of the proposed change be given. Any objections lodged with the committee must be considered before the rates of wages are finally fixed. The necessary notice of the proposed changes is given by advertisements in

⁹ Each of the Agricultural Wages Committees consists of an equal number of representatives of employers and workers, with two impartial members appointed by the Minister and a Chairman appointed by the Committee itself. The Central Agricultural Wages Board also consists of an equal number of representatives of employers and workers, together with appointed members and a Chairman named by the Minister.

several local newspapers and by displaying copies of the proposals in full in all post offices and employment exchanges in the area of the committee. Copies may also be obtained from the secretary of the committee. After this procedure has been carried out the committee forwards to the Agricultural Wages Board copies of the original resolutions, and certifies that the notice has been given in the local papers. The board then proceeds to issue an order giving effect to the new regulations and gives notice of that fact by publishing the order in the *Labour Gazette*, and in local papers as in the case of the proposal. The order is also posted in the post offices, employment exchanges, and police stations in the area covered by the committee.

The date when an order is to go into effect is set by the Wages Board when making it. The period of the duration of the order is left entirely with the committees. Some committees fix rates to apply for an indefinite period, while others fix rates varying from three months to one year. During the period when there was a feeling of uncertainty as to future economic conditions, several committees confined the operation of their decisions to short periods, but more recently, there has been a tendency to issue orders covering a longer period of time. On September 30, 1935, the orders in force in respect of 32 committees were to operate for 12 months, seven had no terminal date, and eight were operative for periods of less than 12 months.¹⁰

In practice, each committee fixes a minimum weekly rate of wages for all *ordinary agricultural workers* in its district.¹¹ The minimum wage set by the committee is for a work-week of a certain number of hours; all work over and above the prescribed number of hours is considered overtime, and must be paid for at a higher rate.¹²

The act empowers the committees to fix minimum rates of wages

¹⁰ Report of Proceedings under the Agricultural Wages (Regulation) Act, 1924, for the year ended 30 September, 1935, p. 10.

¹¹ "Ordinary agricultural worker" is used by the committees to denote adult male workers entitled to the normal minimum wages, that is, on the one hand, not youths or female workers for whom lower minimum rates are prescribed, nor on the other hand, stockmen, cowmen, or other workers of special classes to whom higher rates are payable.

¹² By defining the length of the work-day or work-week to which the wage fixed is applicable, the committees in effect limit working hours.

to apply to any special class of workers. Of the 47 Agricultural Wages Committees in England and Wales, in 1936, 21 had fixed special inclusive rates of wages for workers employed in selected occupations such as shepherds, plowmen, dairy workers, etc. Two committees also had in operation special minimum rates of wages for male workers in forestry which is defined in the orders as "employment in connection with preparing land, planting and maintaining forestry areas and nursery work in connection therewith."¹³

The act also empowers the committees to set minimum rates of wages for agricultural workers employed on piece work. Section 4 of the act entitles such workers to complain to the Wages Committee for the area if they consider that the piece rate paid by the employer is less than the equivalent time rate. In deciding whether or not a piece rate is inadequate a committee must consider whether the rate in question is such as in the circumstances of the case would yield to an ordinary worker wages not less than the minimum rate for time work applicable in the case of that worker. During the operation of the act, however, very few complaints in regard to piece work have been made, and no committee has seen cause to use its power to fix such minimum rates.

In fixing minimum rates the committees are required by regulations made under the act to determine what benefits and advantages may be reckoned as part payment of the minimum rates of wages in lieu of payments in cash. In all areas the provision of cottages counts as part payment of wages, usually to the amount of 3s per week. In the majority of areas, board and lodging, milk, potatoes, and potato ground may be given in part payment of the minimum wage. Other minor benefits are provided in certain areas. These allowances have caused considerable confusion in the administration of the act, especially in fixing overtime rates for special groups of workers.

Before the passage of the Agricultural Wages (Regulation) Act few agricultural workers in England and Wales knew what it was to have a holiday of any kind. Among industrial workers one-half day holiday each week was common, and in many instances

¹³ Minister of Agriculture and Fisheries, Report of Proceedings under the Agricultural Wages (Regulation) Act, 1924, for the year ended 30 September, 1935, p. 13.

these workers enjoyed holidays on Christmas Day, Good Friday and other occasions. The act states in Section 2, Subsection 2, that "in the exercise of their powers under this subsection a Committee shall, so far as is reasonably practicable, secure a weekly half-holiday for workers."

In practice, the committees have accomplished much for the agricultural workers in this direction. All Agricultural Wages Committees, except two, have endeavored to provide for a weekly half-holiday in the case of male workers by defining Saturday afternoon or one other half-day in each week as overtime. In areas where special weekly rates have been fixed for workers employed in tending animals, the weekly half-day overtime provision is often modified in the case of such workers so as not to apply to time spent in care of, and attention to, animals.¹⁴ In the case of female workers the weekly half-holiday overtime provision has been applied to them by 22 of the 30 committees which have fixed overtime rates of any kind for such workers.

Many of the Agricultural Wages Committees have gone farther than providing a half-holiday in each week for agricultural workers. By 1936, 36 committees, with the object of securing some observance of the most important public holidays amongst agricultural workers, had made provision that employment on certain of these days should be treated as overtime employment. In fact, two methods of dealing with this matter have been adopted by the several committees. Some have simply defined employment on the selected holidays as overtime, others have in addition based the weekly minimum wage on a lesser number of hours in the holiday weeks than in normal weeks. In either case the effect of the orders is to take the holiday out of the employment covered by the minimum weekly wage. The effect of the first method is that overtime is not payable in respect of work done on the remaining days of the week until after the full number of hours included in a normal week have been worked. Under the second system the hours of work for which the minimum weekly wage is payable are specifically limited for the particular weeks concerned and overtime is payable not only for employment on public holidays

¹⁴ *Ibid.*, p. 15.

but also for any time worked in excess of the reduced weekly hours covered by the weekly minimum wage.¹⁵

Agricultural Wages Committees are empowered to grant permits exempting the employment of aged, disabled or infirm workers from the minimum wage requirements of the act. Unless a permit is secured for a worker, although aged or disabled, he is entitled to be paid at not less than the minimum rates fixed under the act and his employer is liable not only for the payment of arrears of wages below the minimum rates but also to legal proceedings under Section 7 of the act. In September, 1936, there were 8,978 permits in force, all except 10 of which had been given to male workers.

When the minimum rate of wages has been made effective by an order of the Agricultural Wages Board, any person who employs a worker in agriculture at a lower rate is liable to a fine not exceeding twenty pounds and to a fine not exceeding one pound for each day on which the offense is continued after conviction. The officer may also institute, on behalf of or in the name of the worker, civil proceedings for the recovery of wages due on account of the failure to pay the minimum rate.

As has been stated previously, the Minister of Agriculture and Fisheries is responsible for the enforcement of all minimum rates once they are set by the Agricultural Wages Committees. To assist him in these responsibilities, the Minister has a corps of inspectors whose duties are to investigate all specific complaints received from individual workers or their organizations and to carry out test inspections at intervals. The number of complaints received by the Minister steadily increased from 876 in 1925 to 3,705 in 1936. In 1925 the number of prosecutions instituted under Section 7 (1) of the act numbered 17, while in 1930 they increased to 176, and in 1936 they were 93. Total arrears of wages recovered from 1925 to 1936 as the result of specific complaints amounted to £126,208, while during the same period those recovered as a result of "test" inspections totaled £21,429.¹⁶

¹⁵ The Holidays with Pay Act, 1938, empowers the Trade Boards and the Agricultural Wages Committees in England and Wales and in Scotland to provide for holidays with pay for the workers for whom they prescribe minimum wages. *The Ministry of Labour Gazette*, August, 1938, p. 298.

¹⁶ Minister of Agriculture and Fisheries, Report of Proceedings under the Agricultural Wages (Regulation), Act, 1924, 30th September, 1936, p. 7.

II

The Agricultural Minimum Wage Law of England and Wales has been in operation for a period of fourteen years. Judging from the information obtainable from the authorities who enforce the provisions of the law, considerable difficulties have been experienced in carrying out the orders of the committees. It is true that the present act came into being at a time when the conditions in the agricultural industry in England and Wales, as throughout the world, were in a very unsatisfactory state. The depression in agriculture from the beginning of the present act to 1933 made enforcement of the law very difficult and produced results quite different from those which would have ensued in more prosperous times. It may be said, however, that at no time during this difficult period did the system break down nor has it been necessary to bring into operation the default provisions embodied in the act. The Agricultural Wages Committees functioned at all times and the Minister made earnest efforts to enforce the provisions of the act.

The farmers have found it very difficult to meet the requirements of the law. While most of the better class of employers admit that the minimum rates fixed by the committees have not been too high in consideration of the character of the work performed, almost all employers have felt that if the government regulates wages, it should also take steps to enable the industry to pay such wages.

The organized agricultural workers have felt that the committees have not raised wages as rapidly as was at first expected. After the minimum rates were set in 1924, the average minimum wage for *ordinary* adult male workers remained at 31s 8d per week until June, 1931. Although wage rates had been protected by being pegged at a minimum below which they could not go, the long period of stability at that point gave the workers the impression that little or nothing was being done by the committees to better their condition.

This feeling on the part of the workers was increased when in June, 1931, many committees lowered the minimum wage for *ordinary* workers to 30s 6½d, while other committees accomplished the same results by increasing the number of hours in the work week. These changes were necessitated by the serious condition of the agricultural industry from 1931-33. After 1933, an im-

provement began and by March, 1937, the average minimum wage had been increased to 32s 7d, the highest point since the act came into operation. In almost all cases where hours had been increased, they have been restored to the pre-1931 level, and in a few cases the number of hours has been reduced below that specified before 1931. These actions of the committees have restored a measure of confidence in the act on the part of the workers.

Quite naturally the law was held responsible for the agricultural difficulties in England and Wales during the first ten years of its operation. It is doubtless true that the arable land farmer whose labor bill is relatively higher and whose produce fell most in value, was adversely affected by the regulations of the act. It is also true that, due to the fall in prices, the farmer was compelled to sell more produce from his farm to be able to pay his workers the same cash wage as he had paid before the law went into effect. It is hardly fair, however, to say that the law was responsible for the agricultural depression since the same conditions obtained in most of the major agricultural countries of the world.¹⁷

There is no doubt that the regulation of wages has had considerable influence upon employment in agriculture. The Minister of Agriculture and Fisheries has reported that wage control has had the effect of accentuating the difference between the "one-man business" having no weekly pay-day and the larger farm which cannot be operated without paid labor. The small farmer who carries on the work with the help of his family is not affected by the wages in his district except to the extent that he employs seasonal or casual labor. In recent years small farmers have tended to increase the hours of work performed by themselves and their families to reduce the necessity of parting with cash for wages. It is also said that such jobs, for example, as hedging, ditching, etc., which, although necessary over a series of years, are not immediately productive, are left over on account of the cost under present conditions.

According to figures given by the Minister of Agriculture, the total number of male workers in agriculture in England and Wales

¹⁷ See, "A Review of Wage Regulation in England and Wales", Report of Proceedings under the Agricultural Wages (Regulation) Act, 1924, for the two years ending 30th September, 1930, pp. 18-34.

fell between 1921 and 1930 in the case of regular workers from 612,072 to 564,512 and in that of casuals from 131,253 to 80,241, a total decline of nearly 100,000 men. It is impossible to determine, however, what proportion of this reduction has been due to wage regulation.

While it cannot be asserted that the regulation of wages in agriculture in England and Wales has been an unqualified success, it may be said that considering the conditions prevailing in agriculture during the period the law has accomplished much good. In a recent report, the Minister of Agriculture summarized the results as follows: "1. Increased receipts by agricultural workers; 2. heavier labor costs to farmers which, while they have been offset to some extent by reductions in staffs, have accentuated the depression brought about by the heavy fall in prices realizable for agricultural produce; 3. less secure employment for workers in arable districts during the winter months; 4. improved labor organization and management on a number of farms previously conducted in a haphazard manner, and 5. labor disputes, strikes and lockouts have been avoided. Apart, however, from these material results, wage regulation in agriculture has been associated with an indirect or psychological change to which many persons familiar with the conditions in the countryside attach great importance. The relationship between employer and worker has altered and is still altering. The old relationship which existed up to 20 or less years ago varied greatly from farm to farm. A good employer treated his worker as an old and trusted friend. On the other hand, a bad employer treated his employees as little more than serfs. In neither case were the hours of employment numbered or discussed. These conditions are gradually being altered and new conditions more comparable with those obtaining in the industrial world are taking their place. It would not be true to say that this change is due solely to wage regulation, although it has contributed to the result."¹⁸

III

The question as to the feasibility of applying such a system of agricultural wage regulation in America is certainly a debatable

¹⁸ *Ibid.*, pp. 33-34.

one. The precarious condition of our farming industry, the increase of farm tenancy, and the low income levels of the vast majority of our farmers afford good argument that such a plan could not be applied in this country. Furthermore, in the case of many American farm products, there is a surplus which must be exported to other countries. This situation makes it difficult if not impossible for our government to exercise any control over the prices of agricultural products. As a result, any legislation that tends to increase the cost of producing these products will fall upon the farmers and will worsen their condition.

In England the situation is quite different since she must import large quantities of most agricultural products. Under such conditions the government can increase costs and then increase prices to cover these costs so long as such articles are imported and protected by import duties.

On the other hand, Dahl¹⁹ argues in favor of wages and hours regulation for agricultural workers in America. He states that not more than 20 per cent of our farmers employ farm labor for more than several weeks during the entire year. He further states that "a relatively small proportion of the total operating costs of our farming industry is wages for farm labor. And this small proportion is carried by less than one-fifth of the farmers—the employer-farmers." He goes on to say that in the case of farm foreclosures and bankruptcies in the past ten years it has been the family-sized farm which operates without farm labor that has suffered most. The employer-farmers have made a good record.

Dahl also states that low prices for farm products contribute substantially to this hardship among the majority of farmers. "Two principal causes bring low farm prices: (a) inadequate purchasing power by the nation's wage earners, including three million agricultural workers, and (b) lower production costs on large farms, thus creating a competitive advantage on the farm market, made possible by low wages to agricultural labor." This situation leads him to conclude that improved wage and working conditions for agricultural labor will improve rather than aggravate the conditions of the non-employer farmers who constitute a majority.

¹⁹ *Op. cit.*, p. 144.

PRODUCTION ECONOMICS AND SCIENTIFIC MANAGEMENT

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With the progress being made from year to year in the various fields of learning, it is worth while occasionally to take account of such progress, to note new developments and new relationships, and to re-examine old relationships and interpretations. This is especially worth while with respect to scientific management, for it is quite possible that due to recent developments in this field opinions formed when the movement was in its infancy may be found now in need of some modification or possibly change of emphasis. A survey of the general literature of economics shows that students of economics fail to appreciate properly the contribution of scientific management to economics and to interpret accurately the significance of the more recent thought in this field. Accordingly, it is appropriate to interpret, or re-interpret, modern scientific management in the light of economic doctrine, and in this way to clarify the relationship of scientific management to production economics.

I

The term "scientific management," though familiar to everyone, is often differently interpreted by different students, some of whose interpretations vary so greatly that any reconciliation is practically impossible. In order to encompass as many as possible of the various interpretations a rather broad view of the subject must be taken, a view that attempts to include within its scope all the more important of the various features and characteristics of the movement. This is the view, it is believed, that is held by the majority of those who profess to be its adherents or exponents today. These regard scientific management as a unified system of thought embodying certain general principles and char-

acterized in practice usually by certain features and methods of procedure. They regard it not therefore as a single theory or doctrine, nor as a collection of disassociated practices and mechanisms. The fundamentals of this system were first enunciated by Frederick W. Taylor and his associates. They have been complemented and clarified, however, by many others during the past twenty-four years since Taylor's death. Scientific management today is therefore something more than the system founded by Taylor and his contemporaries, and it is the more recent thought that is of particular interest at this time.

The plan of procedure in this paper consists in examining several of the fundamental features of scientific management. Those selected for examination will include only those which have been the subject of disagreement and apparent misunderstanding. Other aspects, therefore, must be either passed over briefly or omitted entirely from discussion. Accordingly, the subject is here presented under two main aspects, namely, (1) the material, mechanical or engineering aspect and, (2) the human or personnel aspect.

The material or mechanical aspects of scientific management, though sometimes misunderstood in the beginning of the movement, have now become widely accepted throughout industry. Technical research, a fundamental feature of scientific management, is today accepted in principle and appreciated by all but the most backward in industry. Standardization, another feature, has become characteristic of American industry in general. Likewise, production planning, production control, cost accounting, and other features are accepted without challenge and successfully employed by the more progressive managers everywhere. These features and others have become part of established procedure in many phases of industrial activity, and by many managers who neither know of their origin nor profess a knowledge of scientific management.

II

The human or personnel aspects of scientific management have, on the contrary, been subject to considerable disagreement on the

part of the exponents of the system themselves, and to criticism by outsiders. With respect to this aspect several features have in one way or another been most often misunderstood. It is an explanation and interpretation of these features that constitutes the main problem at hand.

In regard to this aspect the first essential point that may need clarification is the relationship of scientific management to industrial psychology. These are sometimes regarded as two entirely distinct fields, the principles and practices of which are even in opposition to one another. This, however, was not true in the beginning and should not be so regarded now. Taylor gave as his second principle of scientific management, the scientific selection, training, education, and development of the workmen.¹ The contribution of scientific management to industrial psychology is duly recognized by Münsterberg,² one of the founders of industrial psychology; and Viteles, another leader in industrial psychology, pays tribute to Taylor's work in this field.³ Industrial psychology and personnel administration are essential parts or branches of the broad field of scientific management, a relationship which should not be obscured by specialized work in each of the various branches of study.

Perhaps the most fundamental feature of the personnel aspect of scientific management is that known as time and motion study, or more broadly, as job analysis. This feature represents an application of scientific research to human work. It has been singled out as a distinguishing feature of scientific management by Hoxie,⁴ and by others who have made a thorough analysis of the system. Moreover, it received particular emphasis by Taylor himself.⁵ This feature deserves therefore particular emphasis and study. Accordingly, time and motion study may be examined for present purposes with respect to three of its essential phases, namely, motion study, fatigue study, and time study.

¹ F. W. Taylor, *The Principles of Scientific Management*, pp. 36, 130.

² Hugo Münsterberg, *Psychology and Industrial Efficiency*, pp. 50, 159.

³ Morris S. Viteles, *The Science of Work*, pp. 49-50.

⁴ R. F. Hoxie, *Scientific Management and Labor*, p. 54.

⁵ F. W. Taylor, *Shop Management*, p. 148.

III

Motion study as developed by Frank B. Gilbreth is concerned mainly with the elementary motions or movements of the hands or other parts of the human body, made in the process of accomplishing work. It views manual labor in terms of motions, and it attempts to determine the best way to accomplish a task by making motions as few, as easy, and as fast as possible. It may be recalled in this connection that John Stuart Mill viewed the whole productive process as a matter of motion, or movement, as he expressed it. He says:

If we examine any other case of what is called the action of man upon nature, we shall find in like manner that the powers of nature, or in other words, the properties of matter, do all the work when once objects are put in the right position. This one operation of putting things into fit places for being acted upon by their own internal forces and by those residing in other natural objects is all that man does, or can do, with matter. He only moves one thing to or from another.⁶

It is likewise a common practice in industry today to regard the whole production process as a successive movement of materials from their original source in mine or field, until placed finally as finished product in the hands of the ultimate consumer.

Taylor, Gilbreth, and others engaged in motion study have broken down this process of movement into its most elementary steps, analyzing every movement of material, tool or worker, and every factor affecting the work process. By analyzing every motion performed in doing manual work and studying these motions in minute detail they have developed a science of human motions and thus of manual labor. Moreover, they have attempted to standardize the best movements and motions and the conditions affecting their performance so as to coördinate and synchronize every aspect of production. Motion study is, therefore, a study of man's individual motions in the process of his moving "one thing to or from another" as the production process is conceived of by Mill.

The chief criticism of motion study has been concerned with its

⁶ John Stuart Mill, *Principles of Political Economy*, p. 24.

attempt to standardize human motions.⁷ It is argued that since individuals differ so widely in physical and temperamental ability, an enforced standardization of their motions, regardless of their individual differences, is unscientific and to a large extent inhumane. There is much truth in this criticism as far as it goes. A further fact, however, must also be taken into consideration. This is that individuals are not only different but that they are also largely alike, and that they are, after all, more alike for purposes of industrial labor than different. This is especially true when the workers who are to perform the standard motions have been in the first place carefully selected, and in the second place adequately instructed and trained in the exact motions or type of motions they are to perform. Workers thus unsuited to perform the standardized motions are definitely eliminated in the beginning and therefore reserved for employments in which they may hope for greater ultimate success.

The main purpose of the standardization of motions is to provide a definite and known way of doing a task in order that the beginner or the poor worker may be trained to perform his work with efficiency and facility. Its purpose is thus not to molest workers who have already become proficient in their tasks, but to train new workers better and more quickly, to improve poor techniques and to bring sub-standard workers up to standard. Good workers are encouraged in every way possible to improvise, to develop still better techniques and thereby help in establishing new and better standards. The procedure here is identical with that in the training of artists and athletes. Beginners are usually put through certain standard drills and practices in order to develop the particular faculties needed. The more advanced students or the accomplished players are, on the contrary, encouraged to develop and perfect their techniques in line with their respective individualities and peculiar abilities. The object of standardization is merely good practice or possibly best practice so far as such practice is definitely known and understood.

In criticism of the standardization of motions, reference is commonly made to "the difficulty of forcing standard motions

⁷ See E. Farmer, *Reports of the Industrial Fatigue Research Board*, No. 14, *Time and Motion Study*, p. 13.

upon the workers." This statement is in part true and in part false. It can be said with assurance that labor objects to being *forced* to do anything. But, so does everyone. The use of force by the exercise of executive authority was the primitive way of introducing changes in methods of work or other conditions affecting the workers. Scientific management, however, introduced a somewhat different way of exercising executive authority. Under functional foremanship the foremen are not given full authority over individual workmen for any purpose; rather they are given authority over specific functions. These foremen in order to get their functions performed properly are required to instruct their workmen in proper methods, to teach them by example and demonstration. This type of organization has been properly called "instructional organization" because of the emphasis upon instruction and showing how rather than upon the giving of orders. The authority to force a worker by discharge or other penalty is reserved for the higher executive officers only, working with or through trained personnel officers and shop committees for the study of each case. This is merely a recognition that a person may be ordered what to do, but that he cannot properly be ordered how to proceed. Methods of procedure must be taught, they cannot be forced with impunity even upon subordinates.

The statement, quite often made, that laborers object to a standardization of their motions in accomplishing their tasks is largely false, although some students who have interviewed workers concerning their attitude toward standardized motions have reported labor's opposition. The great majority of those engaged in introducing standard motions—the product of scientific motion study—do not report this opposition. Except for the inherent tendency in human nature to resist change of well-established habits and customs workers are usually found to be keenly interested in learning and practicing the new motions and motion cycles. Once the superiority of a method is established workers are quick to see its advantages, and to master the new technique and make it their own. What labor has opposed that has led many students astray is not standardized motions *per se*, but the accompaniments or consequences of standard motions as

they are usually introduced. This is most often an increase in required output without a corresponding increase in wages. Labor would naturally resent this practice and in self defense attempt to discredit the whole scheme. A careful analysis of cases of labor disputes and strikes will rarely disclose a serious opposition to standard motions if questions of quantity and price are satisfactorily settled. Many students praise the individualism and the artistry of the old handicraftsman, yet in the regulations and rules of the craft guilds others find the very origin and prototype of modern standardization.⁸

IV

Critics have also attacked time and motion study because of its supposed failure to give proper consideration to fatigue. This criticism is no doubt legitimate with respect to many of the persons who are applying time and motion study in industry. It is, however, unfounded with respect to the leaders in this work and to the true principles and purposes of scientific management. In fact Gilbreth, in actual practice, considered the study and the elimination of fatigue an integral part of his motion study.⁹ He was a leader in fatigue study and he contributed one of the first books on this subject.¹⁰ It is probably that, because he did not devote much space to the problem of fatigue in his work on motion study, preferring to treat this subject in a separate volume, his contribution in this field has been so often overlooked. The study and the reduction of fatigue was an important purpose of motion study as conducted by the founders of scientific management, and the fact that some of the followers have not held to this purpose should not be allowed to mar the whole movement.

Criticisms of the treatment of fatigue in scientific management are sometimes faulty in another respect. That is, they seem to overlook the fact that fatigue is one of the component elements in all human labor, indeed, in the work of most of us a necessary evil. It is one of the factors that distinguishes work from play, and though it may be greatly reduced in severity and be counter-

⁸ John Gaillard, *Industrial Standardization Its Principles and Application*, pp. 8-10.

⁹ See Frank B. Gilbreth and L. M. Gilbreth, *Applied Motion Study*.

¹⁰ See Frank B. Gilbreth and L. M. Gilbreth, *Fatigue Study*.

acted by interest and other devices, it is hardly conceivable that fatigue can ever be or should be eliminated to the extent that some critics seem to presume. Normal fatigue, moreover, is in many cases exhilaratory and as a rule functionally desirable for proper mental and physical health.

Fatigue as a factor of disutility and of cost has been by no means overlooked by either economists or progressive business managers. As noted by Jevons, for example: "Experience shows that as labour is prolonged the effort becomes as a general rule more and more painful. A few hours' work per day may be considered agreeable rather than otherwise; but so soon as the overflowing energy of the body is drained off, it becomes irksome to remain at work. As exhaustion approaches, continued effort becomes more and more intolerable."¹¹ Thus, according to Jevons, labor is the product of the laborer's time on the job and the fatigue resulting from his efforts. Therefore, if time and other factors such as security, esteem, interest, etc., be held constant, the disutility of labor to the laborer should be to some degree proportional to the fatigue produced. Hence, the supply curve of an individual laborer is, other factors remaining constant, his fatigue curve negatively expressed. Accordingly, an employer in purchasing a man's labor should expect to pay partially in proportion to the fatigue produced by the required work.

The truth of this theory is recognized in industry today. Evidence is abundant to show that it pays to reduce fatigue. As is well known fatigue is a prevalent cause of carelessness, inaccuracy, errors and accidents. The fact that a shorter work day in many cases is not followed by a reduction in daily output of labor is strong evidence that fatigue and not time may be the controlling factor. Moreover, by reducing the fatigue element in certain work this work can often be performed by women and others less able to endure fatigue, thus enlarging the potential supply of workers for this type of work. Finally, fatigue even though borne by the worker may often result in illness or premature inability to do work, causing thereby the loss of his earning power to himself and to society. Scientific management recognizes

¹¹ W. Stanley Jevons, *The Theory of Political Economy*, (4th. ed.), p. 171.

fatigue as a factor of real cost in production and it continues to seek the means of its alleviation and elimination in every way possible. That management which fails to consider fatigue is, therefore, certainly not truly scientific.

V

Time study, another phase of this work, has also been the subject of severe criticism. The criticism here centers upon the tendency to speed up the worker.¹² In fact, according to some critics, scientific management is regarded primarily as only a speeding-up device. Although many such criticisms greatly exaggerate this feature, it cannot be denied that speed is a factor receiving full consideration and emphasis in scientific management. The main object of the emphasis upon speed, however, may have been overlooked. The object of speed in industrial work is not so much that of squeezing more work out of the individual workers as it is to save time in production. This emphasis upon speed is by no means confined to scientific management, it is largely characteristic of modern American industry and of American life in general. Speed like standardization has become largely accepted as a matter of course among industrial workers of all ranks, the chief criticisms of both come mainly today from those who do not comprehend their significance in modern production nor the methods of ameliorating their effects upon the workers.

The importance of time as a factor in production is recognized not only in scientific management but in economic literature as well. According to Frederick List, for example: "The well-known fact, that among manufacturers time has an incomparably greater value than among farmers, testifies to a higher estimation of labor. The degree of the civilization of a people and the estimate they fix upon labor cannot be better measured than by the value they set upon time."¹³ To realize the importance of time in production it is necessary only to note the great and increasing use of capital goods in production and to recall that the current costs of the use of such goods are largely overhead

¹² See E. Farmer, *op. cit.*, p. 15.

¹³ Frederick List, *National System of Political Economy* (Tr. by G. A. Matile), p. 187.

costs, or costs which run in proportion to time. It is thus natural that Taylor and his followers should have emphasized speed or time saving in their system. This is why, as they argued, a laborer who produces twice the quantity of output in the same time as another is more than twice as profitable in industry. The faster worker, other things being equal, makes his tools and equipment produce more and increases the turnover of materials in process, without in either case increasing proportionately the cost of production. The purpose of time study is thus to economize in the use of time; and in pursuance of such a purpose, it is not to be doubted that the workers have been sometimes taxed beyond the limits of physical and mental well-being. However, if management is to be considered truly scientific from the social as well as the business point of view it must employ motion and fatigue study as complementary to the study of speed. One phase of this work cannot be properly completed without the other and yet stay within the correct principles and practices of scientific management.

Time and motion study, or job analysis, attempts in general, therefore, to analyze the factors that enter into the process of production. It considers the same factors that are considered in economics, it considers them only more minutely and in more detail. It attempts by thus analyzing production into its basic elements to reconstruct the process of production along more efficient and more scientific lines. Its problem is therefore the old economic problem of division of labor, and its corollary, the combination of labor, which have been studied since the days of Adam Smith and John Stuart Mill. To the general problem of division of labor, scientific management through time and motion study applies, however, a more intensive study than conducted by the economists. Instead of a study of broad or general principles, scientific management attempts to find out how labor may be divided and recombined in each particular instance. Instead of being concerned particularly with the general laws of varying returns or proportionality, it strives to determine exact proportions and optimum proportions for each specific case. Whereas the science of economics deals with the laws of production as they may be conceived and applied universally or to entire in-

dustries, regions, or nations, scientific management aims to apply them within the confines of a single plant or shop and through time and motion study to a single individual. The relationship of time and motion study to economics is therefore mainly the relationship of microcosm to macrocosm.

VI

Another phase of scientific management that has been the subject of much discussion and of much difference of opinion is the question of wages and wage payments. There was a definite lack of agreement between Taylor and many of his associates concerning this question and the issue still exists today. Many of the earlier as well as the more recent exponents of scientific management have developed wage payment plans or systems of their own. Taylor likewise developed and advocated his particular plan; nevertheless, he did not include any specific plan or system when he came to state the principles of his science.

There are, however, two views of the wage problem that may be considered as characteristic of scientific management. These are the insistence upon high wages and upon incentive wages. High wages are advocated because a high relative wage not only gives the employer a better selection of workers, but because it enables him to retain his most efficient and loyal workers and thus enjoy a low labor turnover and a minimum of industrial strife. A high real wage, furthermore, permits the worker to maintain himself in a high degree of physical and intellectual fitness. An incentive wage is advocated in order to induce each individual worker to strive for greater proficiency and success in his required activities, whether this means greater daily output or greater dependability in time of emergency. Beyond these rather general wage policies, however, little unanimity of opinion has existed.

Taylor's whole emphasis, it will be remembered, was upon determining the content of a job, that is, the amount of work a workman could do—not the amount of the wage. His main problem from the beginning of his researches was to measure in terms of both effort required and of results produced the content of the particular job. He hoped to define the various jobs in industry so that standards of method, time, output, and sur-

rounding conditions could be definitely established. He thought that the scientific determination of a proper day's work was antecedent to all attempts to arrive at a proper wage. With respect to the determination of a wage Taylor went only so far as to say that each worker should be paid in proportion to his individual contribution to production. He sought to measure the relative productivity of one worker in comparison with another, and to proportion their individual wages accordingly. He never sought, on the other hand, to determine the proportion of total income that should go to labor as a whole, to any class or group of laborers, or to a single worker.¹⁴ He never entertained any hope of ascertaining by means of the techniques of scientific management the relative proportions of industrial income that should go to labor nor to any other factor of production. This is a problem of economic distribution and far beyond the scope of scientific management.

VII

A final question that has been the cause of much difference of opinion among the exponents of scientific management is the question of labor unions and organized labor. Scientific management has usually gone on record as being diametrically opposed to labor unions and to labor unionism in general. It is also true that Taylor and many of his followers were openly hostile to labor unions in practice. However, there is evidence that a contrary view was also widely held. Many of Taylor's associates openly defended unionism. Mr. Felix Frankfurter and Mr. Robert G. Valentine, both friends of Taylor, took him particularly to task for his views.¹⁵ Moreover, on one occasion Taylor had this to say: "You realize, of course, that I am not opposed to labor unions. Their proper field as they now exist is, I feel, outside of scientific management. . . . I can conceive of a union that would be most helpful to scientific management, but I have not yet seen this union."¹⁶

Taylor's reason for opposing labor unions was stated quite

¹⁴ Frank Barkley Copley, *Frederick W. Taylor, Father of Scientific Management*, Vol. II, p. 412.

¹⁵ *Ibid.*, pp. 419-420.

¹⁶ *Ibid.*, pp. 413-4.

clearly upon several occasions.¹⁷ He found that the unions of his day advocated in general the policy of restriction of output. This is the economic policy of lessening the supply in order to raise prices. Here it must be recalled and emphasized that any policy that advocates a restriction of or a withholding of production was contrary to all that Taylor taught and to the basic philosophy of his system. Seeking maximum production and the minimum of waste he naturally opposed any policy of restriction or limitation for the purpose of raising prices. It is because labor unions adhered to this philosophy that he never saw the union that he thought would be helpful to scientific management.

Although Taylor took this position with regard to labor unions as they were then constituted, he ardently sought the cooperation of labor in production. He enunciated as the fourth principle of scientific management, intimate and friendly cooperation between the management and the workmen.¹⁸ Both Taylor and his associates were keenly interested in the welfare and the prosperity of their workers. They thought, in fact, that employers should do for labor all in their power to do concerning their work, their work conditions and their general welfare. Their chief error was probably in allowing for too little initiative on the part of labor, that is, leaving them too little to do. This error has, however, been to some extent corrected by many, especially of the more recent exponents of the movement, who welcome labor unions and seek their initiative and their cooperation in the managerial problems of production.¹⁹ It should be said in conclusion, nevertheless, that the whole question of the utility and the function of labor unions is still a controversial question in the literature on this subject.

The essential reason why scientific management does not take a definite position on the questions of wages and unions is apparent when its proper nature is understood. Scientific management has properly to do with production, and it lies entirely within this field as it is distinguished in economics. To the extent that

¹⁷ *Ibid.*, pp. 407 ff.

¹⁸ F. W. Taylor, *The Principles of Scientific Management*, *ibid.*

¹⁹ Ordway Tead and Henry C. Metcalf, *Personnel Administration*, p. 386 ff. See also E. H. Anderson and G. T. Schwenning, *The Science of Production Organization*, pp. 231-243.

production can be divorced from distribution in economics, scientific management can be said to have no concern with questions of the latter. Its connections with distribution and its contribution to this field are only repercussions from its concern with problems of production. Its bitterest criticisms, perhaps, have arisen because of these very repercussions, for many of its exponents have sought to ally scientific management with one side or the other of such questions as wages, profits, unions, capitalism, etc. It is because scientific management in principle is not concerned directly or teleologically with such questions that these exponents have been involved in disagreement among themselves and subjected to criticism by the economists. In order to establish scientific management as a system of thought in which there is a degree of unanimity of opinion among its various adherents it is necessary therefore that it be confined essentially to the province of production.

VIII

Having interpreted scientific management as belonging properly in the field of production, it is next necessary to interpret production. The term "production," as is well known, has more than one meaning. Alfred Marshall, among others, interprets production to mean the creation of utilities, or concretely, as the creation of useful goods and services.²⁰ Davenport, on the other hand, gives to production a different meaning. He says: "Economic production is the bringing about of changes appropriate to command a price; it is the response to price-paying disposition. Anything that meets this test is economic production. And nothing else is."²¹ Thus, according to Davenport, production is the creation not of utilities but of values. Production in this sense has been distinguished sometimes as acquisition and at other times as business or business economics. This double meaning of production has led to no end of confusion in the fields of both scientific management and economics.

Scientific management is concerned in production not in the

²⁰ Alfred Marshall, *Principles of Economics* (Vol. I, 2d. ed.), p. 114.

²¹ Herbert J. Davenport, *The Economics of Enterprise*, p. 121.

acquisitive or business sense but in the sense as defined by Marshall, namely, as the creation of useful goods and services. This activity is distinguished by John R. Commons as engineering economics. He explains this distinction as follows:

The classical economists took scarcity and property for granted. Nobody would be foolish enough to produce anything in excess of what was wanted at profitable prices. Consequently the term "production" had the antithetic meaning of production and withholding production. This confused the two ways of making a profit—the efficiency profits, obtained by reducing the man-hour input relative to output, and the scarcity profits, obtained by increasing income relative to outgo. And the further confusion resulted of production of *goods*, or wealth, with "production" of *value*, or assets. It is on account of this double meaning of production that we distinguish the terms "engineering economics" and "business economics." Engineering economy increases output regardless of its money value on the markets. Business economy restricts and regulates the quantity produced in order to maintain or augment its money value. The confusion of the two started from the double meaning of wealth as materials and ownership.²²

The distinction between the two concepts of production, and the association of scientific management with the one and not the other, is all important for a proper comprehension and appreciation of the fundamentals of the system. Scientific management, and indeed all management, has been too often allied with money making, profit seeking, and acquisition; whereas its proper concern is not with such activities. Its subservience to profit seeking and business is due entirely to the economic system under which it originated and under which it has had to operate. Under capitalism it must serve capital, and in serving capital it must produce dividends because it is the dividend seekers who are in control of industry. Were labor in control of the production system, it would be compelled to serve labor and thus produce wages. In having for its goal the creation of useful goods and services, however, scientific management seeks to serve neither capital nor labor as such, but the consumer of these goods

²² John R. Commons, *Institutional Economics, Its Place in Political Economy*, p. 286.

and services. Its object is not scarcity but plenty, not high prices but low prices. It is in thus serving the consumer that it offers its benefits to all of society.

The economic philosophy of scientific management is therefore nothing new in economic theory nor is it difficult to comprehend. It is simply maximum production at minimum real cost. The technique of scientific management is the technique of efficient, economic production in terms of net utility. A full acceptance of this economic doctrine, that production is carried on primarily for the benefit of the consumer, is the mental revolution that Taylor sought to bring about in the thinking of both capital and labor.

BOOK REVIEWS

Ground Under Our Feet, An Autobiography. By Richard T. Ely. New York: Macmillan Company, 1938. Pp. xii, 330. \$3.00.

In *Ground Under Our Feet* a great story of a truly great man is told with charming simplicity. Yet, like other works from his pen, underneath this surface simplicity, there is depth, philosophy, and abundant food for thought.

He describes his early life as that of a "Connecticut Yankee" in a home characterized by rugged honesty, serious purpose, and a Puritanic religion. While "Feeling for the Ground" he pictures vividly his student days at Dartmouth (where he was suspended), at Columbia where he wins an European fellowship, and at Heidelberg with his master teacher Karl Knies.

"Finding the Ground" deals with his early years as a crusader. Through his contacts with Bishop Vincent, Phillips Brooks and others he attempts to bring a "social gospel" to the churches. At Johns Hopkins he implants his ideas in the minds of his graduate students, Albert Shaw, John Finley, and Woodrow Wilson. At Wisconsin he continues to sow the seed and reaps a bountiful harvest.

Dispersed through the story are some choice portrayals of character and personalities. His characterization of Calvin Coolidge is a gem. Almost equally good are those of Wilson and "Teddy" Roosevelt. One tense moment in his life vividly set forth is that of his trial in Madison for radicalism and heresy. Glowing tribute is paid to his graduate students for their gallant defense and yeoman service rendered at this crucial hour.

In this autobiography of Dr. Ely, we find, perhaps, the secret of his marvelous success as a teacher. It is well known that for many years there went forth from Dr. Ely and the Department of Economics at Wisconsin a continuous stream of young economists who became famous in their field—men like Allyn A. Young and Bullock of Harvard, T. S. Adams of Yale, and David Kinley at

Illinois. Working with him at Wisconsin were his one-time students, John R. Commons, W. A. Scott, and E. A. Ross. What was there in his personality and instruction which drew to him such talented young men and then equipped them for outstanding service?

Dr. Ely refers to himself as a "born rebel." It was therefore a fortunate coincidence which placed him at Heidelberg in the classroom of Karl Knies, who, together with Roscher and Hildebrand, comprise the Great Triumvirate which founded the historical school. Before the rise of the historical school it will be recalled that the dominant economics of the nineteenth century had been classical political economy. Begun as a protest against mercantilism it had stressed the efficacy of *laissez faire*. Featuring Ricardo's law of diminishing returns and the Malthusian theory of population, economics had been dubbed the "dismal science." Stressing the efficacy of the automatic forces to create balance between production and consumption, classical economics tended to arrive at a fatalistic philosophy of determinism. Wages were governed by an iron law or the size of the wage-fund. Rent was established by conditions beyond the control of men. Profits tended to decline as civilization advanced.

Into this atmosphere of pessimism the historical economists stepped with their basic slogan "look and see." Perhaps wages can be higher if laborers organize and bargain collectively than if they bargain individually. In the field of international trade they were not sure that free trade was wise, *semper et ubique*. Look and see! Free trade may be wise for mature countries and developed industries, while tariffs may be wise for young nations and infant industries. Competition may be best in some fields and monopoly best in others. Economic principles are not absolute but relative to time, place and circumstance. They must be modified in the light of historical evolution.

Such were the ideas which the young Ely imbibed while studying with Knies at Heidelberg, and such were the ideas which he sought to impart to his students at Johns Hopkins and Wisconsin. They were the ideas which he sought to build into the foundation of the American Economic Association. Gone was the dismal science, economic determinism and a fatalistic philosophy. Man

can hustle history, accelerate progress, and make life happier and more secure if he will "look and see" and do the right thing at the right time.

Thus the students who came under the influence and teaching of Dr. Ely found themselves in a dynamic, challenging and inspiring atmosphere. Now, at the age of 84 we have his autobiography, from the pages of which one may still catch something of his contagious enthusiasm and hopeful optimism.

Louisiana State University

H. L. McCRACKEN

France Faces Depopulation. By Joseph J. Spengler. Durham, N. C.: Duke University Press, 1938. Pp. xi, 313. \$3.00.

Long before refined demographic analysis made it evident that most countries of Western Europe would within a few decades arrive at the stage of stationary or declining population, the population of France had already ceased to show significant increase. Not without reason have French students of population been worrying for 50 years over this fact. And now, faced with what appears to be an inevitable decline, perhaps to the extent of one-fourth, in French numbers within the next 50 years, the worry will be continued and intensified, despite the fact that the populations of France's main economic and military competitors will probably decline in comparable degree. Let it be said at once that the French "repopulationists" will get cold comfort from Spengler's book, for his analysis—even if we make allowance for possible miscalculations—leads ruthlessly to the conclusion that France can stem the tide of declining numbers only by a radical transformation of her economy and her whole culture-complex, including the family.

Spengler analyzes French population movements and policies with an objectivity that one rarely meets with, and in the nature of the case should not expect to meet with, in the writings of Frenchmen, who are so close to the conflicting values involved that they have difficulty in attaining the detachment and perspective essential to disinterested scientific analysis. Furthermore Spengler is not only one of the leading American students of population and vital statistics, but also a trained economist—and one well-read in the other social sciences. He has something

of a flair for pushing his thought beyond and below the superficialities and intricacies of instrumental technicalities into the realm of the broader significances, for *social* economy, of changing economic configurations, institutions, and policies. He is therefore a *rara avis* among the flock of present-day specialists in analytical demography, in that when it comes to the economic aspects of population he knows what he is talking about. Sad to remark, he is one of only a handful of economists—at least in America—who still retain a real interest in population problems. The result is that he has written a monograph which, both in its factual coverage and in its insight, is unique.

Whether or not, as one commentator has averred, Spengler's book surpasses in scope and completeness any other demographic work in the English language, it is without doubt the best treatment of French population, both in factual coverage and in analytical interpretation, in any language, and far and away a more scholarly and thorough study than has appeared in France itself since Levasseur's monumental *La population française* (1889-1892). Spengler's book should be translated into French at an early date.

The first four chapters deal with the historical aspects of French population movements—total population from 1700, regional variations in population movement, natural increase, 1650-1935, and differential fertility and natality. Two chapters are devoted to depopulationist fears and "repopulationism," and another long chapter to the explanations which have been advanced by French writers to account for the decline in natality. Two chapters follow on colonial theory and policy and immigration policy, and a chapter on measures which have been taken—without appreciable result, except in the reduction of infant mortality—to promote natural increase. The final chapter, as already noted, gives the author's analysis and interpretation of the whole problem.

The basis of the interpretation is economic, specifically the theory of ideal economic equilibrium and the idea of optimum population, though there is some excursion into social philosophy. Despite the mature and prolonged thought which has obviously gone into the making of this chapter, it will to some readers be

the least satisfactory part of the book. For it is theoretical analysis, and economic theory is always liberally interlarded with "ifs" and alternative assumptions. Moreover Spengler's exposition of the theory of the relation between population and resources—with the cultural pattern thrown in for good measure—is needlessly detailed and involved. It is difficult reading, not because it is abstract, for it is not, but because the attempt to cover every possible consideration and to attain a precision of statement which will preclude misinterpretation plays hob with the author's style.

At certain points, too, his theoretical interpretation is open to question. For example he holds, apropos population distribution, that where per-worker productivity is higher in some regions than in others, "over-all per capita and per worker output may be increased through the migration of workers and population from low-income to high-income areas," or in other words that "interregional migration will add to over-all per capita output so long as regional marginal productivity levels differ" (p. 259). From the standpoint of formal equilibrium theory this is correct, but it is much too simple.¹ Unless the population of the bountifully endowed region is small enough still to be working resources in the stage of increasing returns, a large immigration from a poor region may mean an intolerable reduction in per capita output, which is equivalent to the per capita standard of living. Unless there are regions underpopulated in the sense that the labor supply is inadequate to work resources at maximum per capita output, the remedy for the overpopulated regions is not emigration but birth control.

The section on "Per Capita Welfare" should either have been greatly expanded or omitted. Preferably omitted, for the population expert, especially in a monograph of this kind, is not called upon to go into a field so heavily sown with subjective and "cultural" values and to such small degree amenable to scientific treatment.

If Spengler is somewhat too ready to make immediate and

¹ It is true, even formally, however, only of *per worker* output. If there are in the two regions significant differences in the ratio of working population to total population, it may not be true.

direct application of the theory of general economic equilibrium—which, despite of or because of all the ingenuity being expended on it by the mathematical economists, must remain a wholly idealistic and formalistic conceptualism, he on the other hand, in discussing the influence of culture complex and cultural changes on population movements, manifests a questionable willingness to take writers like O. Spengler (*Decline of the West*), Sorokin, and—he might have included—Corrado Gini, seriously. He sees that the theory of these writers of an inevitable youth and senility of cultures is open to criticism, but why waste time on speculation of this sort? In the end, J. Spengler's thought as to the relation between culture and human fertility is strongly reminiscent of Spencer's theory of "individuation and genesis," with the important difference that Spencer thought that the complexity of modern life was inimical to high fecundity, while Spengler has in mind fertility and makes the relation between culture and fertility essentially one of opportunity cost. So, in effect, his analysis merely brings us back to the old alternative "bicycles versus babies," or in terms of more current interest, babies versus autos and radios.

Because of the modern multiplicity of cultural stimuli and wants, not ignoring the fact that women, outside the fascist countries, are now of the modern world as well as in it, Spengler sees no likelihood of restoring fertility, even to the point capable of maintaining a stationary population, under the family system as we know it. He suggests that pressure to modify the present-day family will develop. "There is even some probability that efforts to adapt the family to the task of replacing the population may result in the transfer of an increasing proportion of this task to specialists responsible for the bearing and/or rearing of children,"—a proposal (as to the rearing of children) made 40 years ago by Charlotte Perkins Stetson in her *Women and Economics*. Perhaps; but why bother, since Spengler is convinced, as anyone not impressed with the quality of a civilization in which a people can survive only by breeding cannon fodder must be, that France would be better off with a population smaller than she now has.

These remarks do something less than justice to this last,

analytical chapter. In spite of some defects and considerable room for difference of emphasis and inference, it is an analysis which breaks new ground and is everywhere stimulating to further thought.

In general let it be said that Spengler has done a difficult job in this book and has done it definitively. It will not soon have to be done again.

Ohio State University

A. B. WOLFE

Research Memorandum on Population Redistribution Within the United States. By Rupert B. Vance. New York: Social Science Research Council, Bulletin 42, 1938. Pp. xi, 134. \$1.00.

Research Memorandum on Migration Differentials. By Dorothy Swaine Thomas. New York: Social Science Research Council, Bulletin 43, 1938. Pp. xii, 423. \$2.00.

Labor in the United States. By W. S. Woytinsky. New York: Committee on Social Security, Social Science Research Council, 1938. Pp. xxii, 333. \$3.50.

Prior to the early 1930's American students of demography concerned themselves chiefly with quantitative aspects of population growth, with the immediate determinants (i.e., natural increase, net migration) of population growth, with its socio-economic implications, and with certain problems in the field of eugenics. Little attention was devoted to internal migration or to problems therewith associated. In recent years the early neglect of internal migration has been repaired, in part because immigration has ceased to be a problem, and in part because experience during the depression has made evident the social and economic implications of internal migration. In consequence, a number of studies, most of them quite circumscribed, have been made of internal migration. The Social Science Research Council, which has been responsible for some of these, has made possible the studies of Drs. Thomas and Vance, here under review.

Professor Vance's little monograph is clearly formulated and lucidly written, as are all the works that have come from his pen. Commissioned to give coherence to what is, and what may be, known concerning population redistribution, a field opened up by Goodrich's *Migration and Economic Opportunity*, Vance has sum-

marized accepted interpretations of population redistribution, indicated the materials whereon these interpretations rest, pointed out gaps in the data now available, and projected lines along which further research ought to proceed. One chapter is devoted to general considerations pertaining to the study of population redistribution, and one to the nature and effects of internal migration; two chapters deal with contrasting areas of economic opportunity, and with the pattern of change in what constitutes economic opportunity. With respect to population redistribution Vance lays down 21 propositions, often with corollaries, and raises 70 questions, to which properly conceived research may give an answer.

Dr. Thomas's study, which includes contributions by five associates, deals with migration differentials, or migration selectivity,—that is, with the environmental and non-environmental factors which operate at the time of migration, in the process of migrating, or in the course of the migrant's becoming assimilated to a new environment, to differentiate migrants from non-migrants. Among the elements which receive special attention are the situational factors in the community of origin and the community of destination, the direction and distance of migration, factors facilitating or impeding migration, the demographic (i.e., age, sex, nativity, marital and family status) and other (e.g., intelligence, education, psychophysical status, occupation, personality and behavior patterns) qualities of the migrants, and the changes which accompany resettlement and assimilation. Separate chapters are devoted to age, sex, family status, physical health, mental health, intelligence, occupation, motivation and assimilation. Methodology and gaps in the data are discussed. There is extensive reference to English, Swedish, Dutch, and German studies.

Seven appendices and an index are included. Rudolf Heberle has contributed an appendix on German approaches to internal migration, and another on the German literature, consisting largely of summaries of most of the 72 studies listed. Drs. Thomas and Isbell contribute summaries of 119 American and English contributions to the study of internal migration.

Both this study and that by Dr. Vance deserve the careful attention of students of population. Both should give fruitful focus to the study of migration. Dr. Vance's monograph also contains much material of interest to students of labor problems, social legislation, and "applied" economics and sociology.

Dr. Woytinsky's work, a compact summary of data "basic for social security," should prove very useful to demographers, economists, and those interested in the social security program. Its contents can but be suggested. Book One, based on retabulations of occupational statistics in the 1930 Census of Population, deals with the "supply of labor." One chapter is devoted to problems of occupational classification, and four to the distribution of the American working population by industry and by class of work, sex, race, and age; two chapters deal with the median age of gainful workers, by class of work, with the expected period of work and employment in insured industries, with the future changes in the working population, and with the probable number and distribution of persons who will be registered for old age insurance in coming decades; two chapters deal with typical shifts of workers from one class of work to another, including those from insured to non-insured occupations.

Book Two is based on statistics of employment extracted from the Censuses of Agriculture, Mines, Manufacturing, Construction, Distribution, Business, etc.; it is concerned in general with what the author calls the "demand for labor". Two chapters are devoted to an analysis of the comparability of occupational statistics extracted from these special censuses and those extracted from the Census of Population. One chapter deals with the distribution of employment by size of establishment, and one with the distribution of employers and employees in insured and uninsured industries.

Woytinsky's study is rich in tabular and graphic materials. It is indexed. Chapter summaries make its use easy. It is to be hoped that, should a similar study be based upon the returns of the census of 1940, the contents will be arranged on a state and regional basis as well as on a national basis when feasible.

Duke University

J. J. SPENGLER

Comparative Economic Systems. By William N. Loucks and J. Weldon Hoot. New York: Harper & Brothers, 1938. Pp. xiii, 838. \$3.50.

In an age when strange new economic and political doctrines spring up almost over night and with uncanny speed send millions of fanatical devotees marching through the streets, it ill behooves our colleges and universities to allow their students to escape into this strange new world without some understanding of the climate they will there encounter.

There was a time, not so many years ago either, when it was almost worth a professor's job to give a course in the title of which the word "socialism" occurred. Socialism was considered a sort of intellectual disease against which all youthful minds should be carefully shielded. Today, however, matters are different. Socialism is not the only intellectual disorder at large in the world. There is Italian fascism, there is German Naziism, there is the peculiar Russian brand of communism. All of them differ from and are fundamentally hostile to classically-conceived capitalism. These new ideologies, however, have now come to dominate such a large part of the world that the most hidebound reactionary can no longer suppose for a moment that ignorance of them can be considered a protection against them. Only understanding can be such a protection.

In filling this need for understanding, the authors of *Comparative Economic Systems* have rendered a signal service. Not only do they give an admirable analysis and critique of the various 'isms at large in the world today, but they also go to considerable pains to develop the historical, biographical, and philosophical roots of these movements. The whole job is done with an excellent sense of organization and in a style which is always bright and interesting, though never flippant or journalistic.

The first chapter, entitled "A Preface to Economic Controversy," is especially noteworthy. It would be difficult to find anywhere a clearer or more succinct statement of the theoretical presuppositions of that order of society which we rather loosely call "capitalism." But in spite of the formal excellence of this chapter, a query may be raised as to its relevance. The authors tell us that the purpose of this chapter is to provide the student

with frames of reference by which he may estimate the relative success or failure of various economic systems, their desirability or their undesirability.

In so far, however, as these systems have non-economic ends in view, the economic frame of reference is an empty frame,—a frame with no picture in it. If a nation chooses to set for itself the task of achieving homogeneity on a basis, say, of blondness; and if it actually succeeds in doing so, should it be rated a success because it has achieved what it set out to do, or should it be rated a failure because it falls short of doing something that it did not intend to do? And how could one say anything about the desirability of such an end? It would all depend on one's own predilections for or prejudices against blondness. We escape from this dilemma, of course, by making the unconscious assumption that these queer notions of blondness, and race, and all the phantasmagoria of a resuscitated Roman Empire are just stage scenery but that the plot of the drama is still economic. It is difficult for us to avoid making this obeisance before the economic interpretation of history even though we do it unconsciously. But man is more than a "homogeneous globule of desire suspended within a parallelogram of economic forces" and the economic interpretation of history is already dated. It is the reviewer's guess, therefore, that we shall need more than an economic frame of reference by which to orient ourselves with respect to these new systems, and that they will have ultimately to be judged on other than economic grounds.

Alabama Polytechnic Institute

EARLE LEROY RAUBER

Capitalism in Crisis. By James Harvey Rogers. New Haven: Yale University Press, 1938. Pp. x, 210. \$2.50.

This is another popular diagnosis of the ills of our economic system and a rather vague prescription for the cure. In it "every attempt has been made to eliminate complicated technicalities and fine theoretical points" and "detailed scientific accuracy has frequently been sacrificed for analogies." The thesis is that unless our economic system can be made to function more effectively, democracy is doomed and we will inevitably drift toward fascism, wherein, at the time "when the government and its policies

affect the people more than ever before, the selection of the *personnel* of the government passes largely out of their hands."

The troubles of our system are six: (1) the inflexibility of prices; (2) failure of investment to coincide with saving; (3) government fiscal policies which do not sufficiently offset the instability of business; (4) unjustified fear of inflation; (5) unreasonable attitudes which prevent cooperation between government and business; and (6) a growing state autarchy which obstructs trade. In one chapter the author turns dramatist to present the fear of inflation in the form of a comedy, while in another he operates a clipping service to present at considerable length the violent and unreasonable opinions which representatives of government and business express when they make moral issues out of economic problems.

The remedies which the author presents are: (1) "a reasonable degree of prosperity must return and must be continued over a period of years"; (2) in order to maintain that prosperity business must spend or distribute its earnings promptly; (3) if investment fails to equal savings, government spending must make up the difference; (4) government budgets must be balanced only over long periods; (5) internal autarchy must be eliminated; (6) "Cooperation among business, government, and labor must somehow be established"; and (7) "certain elemental needs of the underprivileged classes must be met. . . promptly by governmental action."

University of Virginia

B. U. RATCHFORD

Social Philosophies in Conflict. By Joseph A. Leighton. New York: Appleton-Century Co., 1937. Pp. xxii, 546. \$4.00.

In this book Professor Leighton has presented the ripened views of an enlightened student of human values and social forces. He depicts the crux of western civilization as this: "How, in the face of an increasing concentration of economic control, can economic justice for the common man be secured without the sacrifice of civil and spiritual liberties." The function of existing institutions is to promote "human values"—the realization of the good life. In so far as they fall short of this goal it should be the primary function of men to make the necessary adjustments

within the institutional framework. This process of adjustment involves spiritual progress so that the future of civilization depends upon "a sufficient number of socially enlightened leaders finding a sufficient number of intelligent followers to bring to pass a genuinely socialized and humane order at home and to practice the same principles in international relations." Fascism and National Socialism represent not only "the last desperate stand of individualistic capitalism" but also an intolerable cramping of the human spirit. Communism represents an attempt to secure a cooperative economic society, but it too has failed to provide adequate freedom of thought and action. The way out for democracy is the further development of social controls.

Past civilizations have gone to pieces on selfish factionalism and rugged individualism. Therefore, "Until we are ready to recognize equality of rights and duties inhering in basic equality of human nature, the outlook remains dark and ominous for civilization. . ."

The author believes that the new horizon, the new frontier, is a spiritual, a cultural frontier. Effective pioneering on this new frontier requires "faith in the possibility of the fuller realization of the spiritual values, of contemplative wisdom, the friendship of minds equal in their common striving for the more wisely ordered life, of the enjoyment of beauty, wisdom and love—on this faith alone can we build a more human civilization. . ."

It is in this implied *modus operandi* for progress that Professor Leighton's thought is perhaps the most significant, for it represents the antithesis of the belief that economic systems are improved only through a process of class conflict, dominance and liquidation. Since human societies, especially in the present age, must be highly cooperative, it is true that conflict must be minimized, if not eliminated, and resolved through the operation of spiritual forces which emphasize the requisites of human nature. Except in extremely mild forms all sorts of conflict are probably more destructive than constructive in the social organism.

This reviewer is, however, unable to agree with the thesis which Professor Leighton apparently accepts that in the present totalitarian societies the individuals exist to serve the state, while in democracies the state exists to serve individuals. Democracy

is not dependent upon the existence of particular political forms of organization. All states are simply dominant forms of social organization and as such reflect the prevailing spiritual forces. While the spiritual quality of some of the totalitarian societies may be properly questioned, the undesirable elements in them should not blind us to their use of spiritual as well as physical forces in achieving essential social integration and cooperation.

The book suffers greatly from a lack of organization and hence from unnecessary repetition, and will therefore prove difficult for the general reader.

University of North Carolina

J. G. EVANS

Industrial Reconstruction and the Control of Competition. By Arthur F. Lucas. London: Longmans, Green & Co., 1937. Pp. xi, 384. \$5.75.

The decline of competition, the end of laissez faire, the rise of monopoly, and the vogue of administered price are developments characteristic of our phase of the capitalistic era. Perhaps they are indicative of an advanced maturity of our social economy. Their theoretical implications are being explored by the students of imperfect or monopolistic competition, of oligopoly and oligopsony. Their growth and spread is recorded in innumerable studies of the cartel, of the modern corporation, of rationalization, of social planning, of controlled and totalitarian economies, of *Kriegswirtschaft*, and similar aspects of current economic reality.

In this world-wide movement away from free competition England, which gave birth to both the industrial revolution and to classical economics, occupies a unique position. An analysis, therefore, of the ways in which British mining, industry, agriculture, and finance are meeting the exigencies of this new era and are reacting to these new forces is of especial importance.

The book under review serves as an excellent introduction to this vital chapter of current history. It combines in judicious fashion description and appraisal. The study is divided into three major sections. The first consisting of three chapters analyses the British control movement as a whole, and pictures a background of legal, social, and economic developments. The circumstances which led to the abandonment of the competitive

ideal and started the movement toward control are reviewed. The scope of this movement is indicated and the peculiar forms which it is assuming in Great Britain as well as its implications for public policy are outlined. Throughout this first part the author wisely confines himself to objective exposition and analysis, carefully abstaining from subjective appraisal and the advocacy of his own schemes.

This introductory section is followed by seven chapters dealing with the history up to about 1936 of the pertinent developments in such staple industries as coal mining, iron and steel making, shipbuilding, flour milling, the manufacture of cotton textiles, the chemical industry, and agriculture. This part, however, is much more than a mere history, catalogued by industries. The examples are chosen with a view to bring out functional differentiations as well. Moreover, the author clearly reveals the inevitable interrelation between the type of industrial organization and the degree of public control required. In general, industrial organization is divided into three major types: a loose-knit type of the trade association variety; a highly compact type represented by the combine, and an intermediary type identified with, or resembling, the cartel. That in significant instances the findings of the author have been superseded by new developments cannot be surprising to anybody familiar with the alarming speed with which industrial history is being made in our restless age, and with which the relationships of the individual to the group and of private enterprise to state action are being reshaped.

The remaining five chapters are devoted to a critical analysis of the underlying issues of public policy and control and to an appraisal of the success with which these issues have been met. The appraisal proceeds along four distinct lines indicated by separate chapters: the determination of prices, the regulation of output, the maintenance of industrial efficiency, and economic and legal safeguards.

The author is fully aware of the extreme difficulty which faces the student attempting to appraise current developments in general, and in a country like England in particular. For is not England the land of the unwritten constitution, of "muddling through," the land where the essence often changes behind an

unalterable veneer of form? Nevertheless, the author does venture to express the general opinion that while the negative phase of the evolution marked by a rapid and progressive removal of the safeguards of free competition has advanced rapidly and widely, its positive side, i.e., the development of social control measures has been neglected. Under the circumstances it appears to the author that the consumer is left dangerously exposed to serious abuses of inadequately controlled monopolies or quasi-monopolies. That recent events in the realm of international politics are bound to affect this social lag and will go far to influence the future course of British social policy appears inevitable.

University of North Carolina

ERICH W. ZIMMERMANN

Price Control in Fascist Italy. By Henry S. Miller. New York: Columbia University Press, 1938. Pp. 146. \$2.00.

Although government price fixing is of considerable importance in the totalitarian states, very little information concerning the operation of these controls has been printed in English. Dr. Miller's study, therefore, fills a gap and furnishes much valuable data not previously available for Italy.

Price fixing on a moderate scale was undertaken during the early years of fascism in Italy, but it was not until 12 years after the "March on Rome" that comprehensive measures for government price fixing were carried out. From June 16, 1934 to October 16, 1935, "a loose local control with no central supervision except the orders of the Secretary of the Fascist Party" prevailed. On the latter date, a Permanent Price Committee was established and "gave Italy its first central control over prices under Fascism." This control was instituted while the Ethiopian War was being waged and hence followed the practice of most nations in times of war. With the conclusion of hostilities, however, the control was extended until today a comprehensive system of price fixing is in operation. The entire volume, except for the first chapter, deals with the controls set up since 1935. A chapter is also devoted to the available statistics of Italian prices. The statistics presented are admitted to be inadequate and in some instances to have "grave weaknesses." They are concerned mainly with broad composite averages which give little indication of how price fixing has actually worked out.

While a broad picture is given of price fixing in Italy, little detailed analysis is made of the various devices and there is almost a complete absence of critical appraisal. A lack of familiarity with the experiments in other countries and the literature on the subject is indicated in the following statement: "The attack was centered on retail prices which meant that retailers had to work on smaller margins. This is the method pursued in almost all government price fixing" (p. 23). The opposite statement would be more nearly the truth since, with minor exceptions, (in the fascist countries and in times of war) governments have been concerned with agricultural and raw material prices rather than retail prices.

An undue emphasis is given to the purported relationship between changes in the gold value of the currency and internal prices (pp. 40, 42, 62, 110-11, 135). Thus Dr. Miller attributes the failure of prices to advance "the possible theoretical rise of 52%" to be expected from the devaluation, in a large measure to the efficacy of price control. No evidence is given that internal prices should have made such a response to devaluation. The events of the last few years in many countries have indicated that no close relationship between internal prices and exchange depreciation is to be expected in a short period of time unless imports account for a relatively high proportion of the total domestic activity and even then no corresponding adjustment will necessarily take place. Such developments, however, are ignored by Dr. Miller.

Another illustration of assumption which appears to have little factual basis is found in the author's statement that "Economic conditions in France and Italy during these times (1935-38) are fairly comparable. Although France has tried price control of a sort during this period, the effectiveness of control in Italy's closed economy appears to be much greater than that of France's liberal economy." No evidence is presented of a comparability in the economic conditions of the two countries (a very questionable analogy at the best). Furthermore direct price control played a relatively unimportant rôle in France during that period. The prevalence of many similar statements concerning other conditions which could have been easily ascertained tends to cast a shadow on the reliability of other parts of the author's description.

Thus while new light has been shed upon price fixing in Italy, there is much reason to question the adequacy of the picture presented in this volume. The study would also have proved more valuable had Dr. Miller given a more detailed analysis of particular commodities so that the technique and consequences of control would have been clearer.

New York University

JULES BACKMAN

The Theory of Prices. Vol. I. By Arthur W. Marget. New York: Prentice-Hall, 1938. Pp. xxv, 624. \$6.00 trade, \$4.50 school.

As a sub-title, the author calls his work "A Re-Examination of the Central Problems of Monetary Theory." In carrying forward this study, Dr. Marget has done an exhaustive piece of research. Thanks to his classical training and background, he is able to examine original sources, whether they be in Italian, French, German, Swedish, or Dutch. Excerpts from these many sources in foreign languages have been translated and are carried as liberal footnotes in fine print on the lower part of the page. Thus, we have before us the main trend of thought by the author, accompanied by a "source-book of raw materials" for those who wish to go with him the "second mile."

So far as *School* or fundamental theory is concerned, Dr. Marget boldly proclaims himself as a "Quantity Theorist" as set forth by Fisher's Equation, if and when properly stated and explained. His own position led him into very direct conflict with much of the monetary theory as presented by J. M. Keynes in his two volume *Treatise on Money* and his later work, *The General Theory of Employment, Interest and Money*. As the author loves a combat and is fascinated by argumentation and debate, the style is of a highly polemic nature, with most of his thrusts directed at Mr. Keynes. As an apology for this, Dr. Marget says in the preface "those of us who disagree most categorically with Mr. Keynes, and insist upon subjecting his contentions to a severely critical examination, pay him the clearest of compliments as a creator of the kind of intellectual ferment out of which it is hoped truth will ultimately rise."

From the above comment, it must not be inferred that the argument of the book is carried on on the plane of *argumentum*

ad hominem or *ipse dixit*. Dr. Marget is an indefatigable student and researcher. He attacks Mr. Keynes' ideas with the tools of scholarship. Where Keynes uses mathematical formulae, Dr. Marget meets him on his own ground with rugged mathematical analysis. Where others have contributed relevant ideas or evidence, that is introduced and proper citation tendered.

If any criticism of the book is justified, it is that it is too critical, and too concerned with an exposition of the many errors which he believes to have been sponsored by Mr. Keynes. However, there is a second volume to follow, which doubtless will be more positive and constructive. The volume here reviewed, in tone, is not unlike the highly critical work of Böhm-Bawerk on *Capital and Interest*. Should Dr. Marget follow with a second volume on the theory of prices, comparable to Böhm-Bawerk's *Positive Theory* his reputation in the field of money and prices will be quite secure.

Louisiana State University

H. L. McCracken

International Trade and Finance. By John Parke Young. New York: Ronald Press Co., 1938. Pp. 526. \$4.00.

As the title of this work suggests, the author makes a very broad sweep of the many problems to be found in the fields of foreign trade and international finance. There are 31 chapters dealing with about as many different problems gleaned from a large number of related fields. There are chapters on the history of commerce, the theory of foreign trade, foreign exchange, international finance procedure, money markets, gold and international prices, tariff problems and tariff history, reparations and war debts, ocean shipping, and the American merchant marine. The chapters devoted to problems of international finance introduce much current material relating to problems such as exchange control, capital flights, and the Tripartite Agreement, but the treatment of these problems is sketchy. The book is more of the nature of a compendium than the average textbook, and as such it has all the virtues and vices that are associated with compendia. It is entirely extensive in its treatment, and lacks the incisive analysis that is to be found in other texts on foreign trade and international finance of a more limited scope. If one wished to make a survey of the whole field of international trade and finance, this work

would very adequately serve the purpose. It is well written, has a satisfactory arrangement of the chapters, and is equipped with an extensive bibliography.

For intensive work in the fields of foreign trade and international finance, one would have to turn to more specialized texts, since this treatise covers such a large variety of topics. For example, the chapter which discusses the reparations and war debt problems in 12 pages would prove to be of little value except perhaps for introductory purposes. Many other chapters have the same sketchy treatment. For other than orientation purposes the book would hardly suffice, but as survey material it is a comprehensive piece of work.

University of Maryland

ALLAN G. GRUCHY

The Federal Reserve Bank of Boston. By Joseph H. Taggart. Boston: Bankers Publishing Co., 1938. Pp. xii, 283. \$5.00.

This title is one in the series of analyses of the several Federal Reserve banks projected by the Department of Economics at Columbia University. In common with some of the studies already published, the analysis of the Federal Reserve Bank of Boston proceeds from a survey of the financial and economic structure of the First District to a discussion of the organization (Chap. 3) and operations (Chaps. 4, 6-8) of the bank, a sequential treatment which is somewhat broken by Chapter 5 which is devoted to an analysis of the member banks. Following the discussion of the operations and policies of the bank, the Boston money market is described in Chapter 9, and a concluding chapter is devoted to the increased concentration of control in the Board of Governors effected by recent legislation.

The several portions of the book are not of uniform quality. While the analysis of the economic and financial structure of the First District serves quite admirably the purpose in hand, the discussion of policies and operations for the years, 1914-1929, is little more than a chronological and factual commentary lacking for the most part in penetrating appraisal. The succeeding years are more adequately handled. In the opinion of the author the Federal Reserve Bank of Boston serves a compact and homogeneous district though a portion of the bankers vigorously protested

their inclusion in the First District. He thinks the bank has been very ably managed and has been unusually successful in maintaining the loyal support of its member institutions by virtue of the quality of its management and its effective public relations policies. Par clearance issues which embittered bankers in some of the other districts caused no concern in a section which had already operated on a par clearance basis.

Despite the lavish use of data, and perhaps at times because of it, this study leaves unanswered many issues. It throws additional light on the value of the system of regional banks, but too little attention is devoted to a measurement and appraisal of regional as contrasted with system procedures and policies. These limitations in the study are in part due to the imponderables involved in the situation and in part to the failure to make the most effective use of available data.

University of North Carolina

JOHN B. WOOSLEY

Inflation and Deflation Can Be and Should Be Eliminated! By Emmett C. Barr. Pittsburgh: Emmett C. Barr, 1938. Pp. 94.

The author presents the view that inflation and deflation are the result of using "debts" as money. He says: "Despite the use of the term by well-known economists, there is no such thing as paper money. Neither is there such a thing as bank money. This failure to differentiate money from promises to pay money is one of the fundamental and far-reaching errors of economic theory."

There can be no quarrel with a writer on his choice of definitions. What matters is the use he makes of his definitions. Mr. Barr comes to the conclusion that only gold is money, and that only gold and warehouse receipts for gold should be used as money. If this were so, he holds, there could be no rapid increase in the quantity of money and there could be no later decrease in the quantity of money. There will be many to question Mr. Barr's conclusion that all would be well in this economic world if the government and the bankers did not inflate us and deflate us with their creation of debts. The fact is that despite the study that he seems to have given to cyclical fluctuations, the author

retains an extremely simple view of the complicated phenomena that constitute business cycles.

Mr. Barr would convert our monetary system immediately to the use of gold and warehouse receipts for gold. He is not disturbed by the fact that this would necessitate a reduction in the quantity of money by more than one-half. He is not disturbed by this because he holds that the absolute level of prices is of no consequence; and the relative prices of goods, presumably also incomes, would be adjusted to the smaller quantity of money. What an adjustment this would entail!

University of North Carolina

E. M. BERNSTEIN

Wages and Income in the United Kingdom since 1860. By A. L. Bowley. Cambridge: University Press, 1938. Pp. xix, 151. \$2.50.

This small volume of 150 pages contains a summary of the significant findings of Dr. Bowley on money wages, real wages, occupational distribution, wage rates, and the national income. Not only does it bring together the scattered writings of Dr. Bowley on these questions, but it also contains critical observations on the wage and income estimates of other investigators, and on the technical difficulties of making wage and income estimates.

The essays show clearly that precise measurement of wages and income is extremely difficult, although reasonably accurate approximations can be made of changes in wages and income. This difficulty of precise measurement is particularly apparent when such controversial matters as poverty or adequate working class budgets are considered. The concept of a satisfactory diet changes steadily, not only because the social attitude towards standards of consumption changes, but because scientific discoveries shift the emphasis from bulk to calories and more recently to vitamins.

Perhaps for most economists Dr. Bowley's book will be of greatest interest not so much for the light it throws on questions of statistical method, as for the information it makes available on such fundamental questions as the rise in real wages and the growth of income.

University of North Carolina

E. M. BERNSTEIN

Collective Bargaining Under the Wagner Act. Law and Contemporary Problems, Vol. V, No. 2, Spring, 1938. Durham, N. C.: School of Law, Duke University. Pp. 175-333. 75 cents.

The nature of its contents justifies this belated notice of the spring, 1938, number of *Law and Contemporary Problems*. This entire issue is devoted to an examination of various problems of labor relations as affected by the National Labor Relations Act, together with a supplementary article on the settlement of industrial disputes in Great Britain. The material should prove of considerable present value to business men, labor leaders, labor economists, and lawyers concerned with labor board cases and labor law in general.

One of the most interesting articles in the issue is that by C. E. French, dealing with some effects of the Wagner Act upon employer personnel policies. Harry D. Wolf contributes a thoughtful proposal for the enforcement of collective bargaining agreements. This article is especially pertinent today in view of the wide discussion of union responsibility in the fulfillment of collective contracts.

An article is devoted to each of three basic problems that arise under the act: the determination of worker representatives, unfair labor practices, and the duty to bargain collectively. Other articles deal with the adjustment of disputes under recently concluded collective agreements, and with union policy in the making of agreements and in other matters affecting the operation of agreements. Finally, the counsel and associate counsel of the National Association of Manufacturers discuss amendments to the act proposed by the organization they represent. This is followed by an excerpt from an address by Chairman J. Warren Madden of the National Labor Relations Board on the general subject of "equalizing" amendments.

The Duke University Law School, which issues *Law and Contemporary Problems*, deserves credit for presenting this well-rounded discussion of problems that cluster about one of the most important pieces of labor legislation ever passed in this country.

The Woman's College,
University of North Carolina

H. M. Doury

The Theory and Measurement of Demand. By Henry Schultz. Chicago: University of Chicago Press, 1938. Pp. xxxi, 817. \$7.50.

When a new field of theoretical or statistical analysis develops it is inevitable and proper that for some years the contributions will appear in widely scattered periodical literature in several languages, in the form of studies attacking small sectors of the field, or of highly technical experimental methods which quickly become the field of controversy and sifting. The general student cannot be expected to follow such developments in all fields of economics. In the field of demand analysis, both theoretical and statistical, the time was ripe for a comprehensive and integrated treatise to gather together and sum up the accumulated results of the last 25 years of research. The late Henry Schultz was fully qualified, by his own contributions as well as by his broad study, for this task, and his *Theory and Measurement of Demand* fills the prescription admirably.

Schultz would be the first to disclaim any belief that this is the final definitive treatise on the subject, insisting it is only the first mile-post in a broad program of bringing realism into the economics of demand, cost and supply. His final chapter on "Retrospect and Prospect" gives a comprehensive outline for further research and an appeal for support for the arduous statistical program involved. He describes the present work as an attempt "...to unify the theoretical-quantitative, the empirical-quantitative, and the historical approaches to the study of demand. . ." (Preface).

The book is divided into three parts, the first and third of which will be of the widest interest to general economists. Part I (150 pp.) outlines the theoretical foundation of demand studies, chapters being devoted to the pure theory of demand curves, their derivation from time series data, their derivation from family-budget data, and a realistic discussion of the theoretical and statistical framework of Schultz' own methods. Part II (400 pp.) gives his Statistical Findings when he applies his methods to determining the characteristics of the demand for ten agricultural commodities, ranging from sugar and cotton to rye and buckwheat. Each chapter concludes with a brief summary of findings. Part

III (100 pp.) presents the developmental theory and application of Schultz' most original contribution to demand theory, that of the Interrelations of Demand. Very complete appendixes, bibliographies and indexes complete the volume.

Economists who have tried to comprehend the contributions of so-called mathematical economists (and who has not tried and given up the attempt?) will rejoice at the contrast in realism and clarity exhibited by the present treatise. Most "mathematical economists" allow their boundless enthusiasm for mathematical skill and technique to carry them, not only into the rarefied atmosphere of dealing with questionable assumptions, but into the Never-Never Land of pyrotechnics whose methods and results have no recognizable meaning. These technical excursions may or may not be good mathematics: certainly they are not economics, unless economics be identified with mere logic. To the extent that the assumptions implied by the mathematical operations are not explicitly stated, they are not even good mathematics. To the extent that economic terms are given mathematical definitions having no recognizable relation to economic concepts; to the extent that recourse is had to unknown and unknowable functions, to operations whose significance in terms of their practical meaning is unstated (possibly because unstatable), and to statements of results merely in the form of a mathematical formula (possibly because the formula has no meaning); to this extent do these writings fail to be economics. In contrast, it is the explicit correlation of mathematical technique with statistical data on the one hand, and with economic theory on the other, that recommends the present work to all economists. Here the reader will find no insult to his intelligence as an economist, but a sustained effort made to carry along his understanding of and confidence in the techniques employed.

It behooves the modern economist to acquire sufficient mathematical training to enable him, for instance, to understand an equation as merely a shorthand statement of a relationship between the variables involved. All of us know that when we apply the mathematical technique symbolized by the sign $+$, we get a sum, a total—a process which has a valid economic interpretation. (But it has its limitations: we cannot add two men and ten dollars.

Neither is the utility of two units twice the utility of one.) The economist should likewise learn that when a function is differentiated, a rate of change is given; that a least-squares fit is merely a kind of formalized moving average which may or may not actually "fit." These processes are valid for certain economic situations. The point of this little essay is that this text by Schultz furnishes an excellent exercise book in this lesson. The author is dealing with significant material, he handles it in a restrained and realistic manner, and he makes a conscious effort to make the technical discussions intelligible to nonmathematical readers.

With this type of book, a review which attempts to give the outline of thought as a substitute for a reading of the book itself is a disservice to the reader of the review. Suffice it to say that "demand" is no longer merely the assumed relation between prices and quantities for an article, "other things assumed to be equal," based on the Marshallian attributes of the commodity. The actual shape and slope of the demand curve, and its movements over historical periods are ascertained, with measures of the relative importance of the various impinging forces. The interrelations of the demands for completing (joint-use) and competing goods are factually examined in the framework of a theory of "rational human behavior."

The two hundred-odd pages which Schultz identifies (p. xv) as of special interest to the general reader should be on the "must" list of reading for economists who haven't had time to keep up with developments in this intriguing field.

U. S. Department of Agriculture,
Washington, D. C.

WIRTH F. FERGER

Dynamic Theory of Wealth Distribution. By Montgomery D. Anderson. Gainesville: University of Florida Press, 1938. Pp. x, 243. \$3.00.

Professor Anderson's latest book is, in a general way, similar to his earlier *Capital and Interest*, being an interesting composite of short summaries and criticisms of pertinent sections of classical economic doctrines, then moving into either restatements or

distinctly new formulations, and following with mathematical and statistical demonstrations.

The beginning chapters are concerned with fundamental concepts, especially saving and investment, both from the individual and social points of view. As one would expect from the title of the publication, there are chapters devoted to profits in the long and short run, rates of interest, average wages, the classical rent doctrine versus the dynamic theory, marginal productivity versus classical rent, statistics of personal inequality, and a final chapter on the philosophy of inequality.

Those who do not have a sweet tooth for mathematics may not care for the sections on saving and investment, capital formation, profits and interest, although each is intelligible whether or not one wishes to study the symbolic logic carefully. The author seems to prefer the mathematical method not only for precision in stating definitions and clarifying relationships, but also for building a theoretical framework readily adaptable to statistical verification, which, one must admit, is a desirable feature of a dynamic theory. On the other hand, it is not to be assumed that the use of the mathematical method in the book has resulted in unrealistic concepts. Quite the contrary is true. A conscious effort has been made to relate all definitions which differ from those considered orthodox to the popular concept of the term.

Those who have followed the "old" and the "new" Keynes will be interested in Professor Anderson's dynamic conceptions of saving and investment:

1. "...the act of saving might very well be defined as a reduction in the rate of turnover of goods, or what is about the same thing, an increase in their period of turnover" (p. 23).
2. "Expenditures of money made for the restoration of values destroyed in the productive process would be counted as *replacements*, while expenditures made for incremental or *new* wealth would be considered *investments*" (p. 30).

The similarity of the views of Anderson and Keynes (as expressed in his *Treatise on Money*) is evident when the former states "perfect stability in the value of total business transacted would require that saving and investment be equal at all times," and "when

saving is positive and greater than investment—business activity will be decelerating."

A criticism of *Dynamic Theory of Wealth Distribution* hinges upon one's concept of theory as a tool of economic analysis. Does the theorist describe or explain? If an explanation is sufficiently complete and embraces all causal factors from the dynamic point of view, then reasonably accurate forecasting ought to follow. From this approach consider Professor Anderson's definitions of demand and supply of labor, "namely, that the demand for labor is a shorthand expression for all those factors which are positively correlated with the wage rate, while the supply of labor is a synthesis of all those forces which are negatively correlated with the wage rate." Hours of labor worked is selected as the best index of the supply of labor (but, for the sake of argument one could suggest that demand is indicated, also) and the volume of industrial output is chosen to measure the demand for labor. Finally, from the theoretical point of view, is the causal connection explained, or is it assumed as part of the data for a further hypothesis?

Whether or not one agrees with the ideas of the author, it must be admitted that *Dynamic Theory of Wealth Distribution* is refreshing for its originality and is not to be classed as merely a new mixture of old ideas.

University of Wisconsin

ERWIN A. GAUMNITZ

An Introduction to Economic Analysis and Policy. By J. E. Meade and C. J. Hitch. New York: Oxford University Press, 1938. Pp. xvii, 424. \$2.50.

This book is an American edition of Meade's earlier book by the same title. Americanization is accomplished largely by changing pound to dollar signs and making "government" a singular noun. The institutional description has been made American, referring, for instance, to the Federal Reserve Banks, but little else is changed. English flavor is retained by using tea as the principal commodity for illustration purposes.

The appearance of an American edition, however, is well worth a review, for this reviewer hopes that Meade and Hitch will be the pattern for the next crop of general economics textbooks.

It is to be expected that textbooks will be behind times on controversial issues, but present-day American textbooks are a generation behind the progress of economic thought. They leave the student quite unarmed before the first blast of the institutionalist. Textbook economics cannot explain the existence of unemployment nor the workings of a society of imperfect competition, and lack of information on these two points leaves the student defenseless. If economic theory for undergraduates is to be saved it can best be done along the lines of Meade and Hitch.

Many recent diagnoses of our economic problems confuse problems arising from different sources. They confuse problems of unemployment, problems of imperfect competition, and problems of inequality. These are perhaps our major problems, but they are largely independent. The existence of unemployment, for instance, cannot be explained by imperfect competition, as is so frequently attempted. Again, the fundamental critique of imperfect competition is not that it allows some persons to exploit the community and create inequality. Meade's analysis sorts these problems admirably. Unemployment is considered first and is demonstrated to be a problem of effective demand and hence a purely monetary problem. The analysis and the suggestions for coping with unemployment follow strictly Keynesian lines. The second problem discussed is that of imperfect competition, and the authors demonstrate that it is a problem involving the allocation of the factors of production amongst industries. Imperfect competition is to be condemned because it does not combine factors properly to create the greatest income. Paradoxically enough, the difficulty is that there are too many firms operating in an imperfectly competitive industry, and therefore enlightened governmental policy should aim at forcing firms out of such industries and controlling those which remain. This conclusion, of course, does not apply to monopolies of the ownership of natural resources, but such monopolies are rare. Thirdly, the authors discuss the problem of inequality, a problem independent of the others in the sense that the solution of the others will not solve the problem of inequality. Drastic taxation and large blocks of governmentally owned property are proposed.

The remainder of the book deals with problems of optima of

capital and labor, and with the less fundamental problems of free trade. The introduction by Professor Hansen is particularly noteworthy.

University of North Carolina

EARL HICKS

Lament for Economics. By Barbara Wooton. New York: Farrar & Rinehart, 1938. Pp. 322. \$2.00.

In this book much of the economic theory of today is indicated as useless because "after all their arduous studies, the economists cannot be relied upon not to give diametrically opposite diagnoses and prognoses of the same situation (not to mention the incompatibility of the various remedies which a few of the more courageous among them are sometimes induced to prescribe); because the economists feed on their own tails by busying themselves with the analysis of imaginary worlds which they have themselves invented; and finally because they are passing off as the result of purely scientific inquiry what is in reality no more than a partisan advocacy of particular social policies."

According to Mrs. Wooton the traditional classical analysis of economic theory does not fit the actual world since it rests upon the assumption that we make a full use of all the resources that we have, an assumption so contrary to the facts in this world of output restriction and unemployment that the whole body of classical analysis and its contemporary refinements are rendered "inoperative, irrelevant, and unreal." Furthermore, contemporary economics is so contingent upon a particular set of man-made institutions that, since these institutions do not exist in pure form or are at best temporary, it can hardly be called a science, and it is constantly threatened with becoming a mere apologetics. The market is itself a product of the institutional environment and "any argument which sets out from the premise of market infallibility will reach a vicious conclusion."

Especially does she believe that economics as a social study must be based upon social objectives the nature and quality of which can be described and assumed only after adequate inquiry. She recognizes that while the principle of equi-marginal returns may be a good principle to guide the apportionment of resources it is impossible to escape the use of judgment, perhaps frequently

blundering judgment, regarding the procedure for attaining both optimum economic efficiency and optimum welfare.

With the indictment of contemporary economic theory and with the suggestions for making economics a more useful social study as set forth in this book, the reviewer has no quarrel. The discussion throughout is carried on with commendable keenness, fairness, and humility.

However, there is in the book one lamentable under-emphasis. Mrs. Wooton remarks that "If the laws of 'economic science' were applicable to, at the least, a large proportion of all the varied forms that human society has assumed, or may assume, in its efforts to make the most of its resources, then perhaps their scientific character might be more gladly conceded." In that direction this reviewer thinks lies hope for the future of economics as a useful social study. Given an understanding of the broad objectives of a society, the theory of resource utilization can be formulated for the social economy without assuming the existence of any particular institutional framework. Such theory would be useful as a criterion in passing judgment upon the operation of the existing procedures. Instead of emphasizing this possibility, the obvious lack of usefulness of contemporary economic literature in a socialist economy is stressed. *Surely, the most useful analytical tools of the economists are ubiquitous in their applications.*

There is, however, a source of grave difficulty even in the formulation of such a broad social end as democracy as a goal in resource utilization, for as Mrs. Wooton observes: "democracy often survives only insofar as there is a tacit agreement not to recognize its implications." Wherever he may turn the economist will apparently be caught in the crossfire of social conflict.

University of North Carolina

J. G. EVANS

Economics of Transportation. By D. Philip Locklin. Chicago: Business Publications, 1938. Pp. x, 863. \$4.00.

In this revised edition the general plan and outline of the earlier edition is followed, with some rearrangement of subject matter and addition of new material on certain important developments since the earlier publication. A chapter on Pipe Lines and one dealing with the significant problem of Transport Co-

ordination have been added. The chapters on Regulation of Highway Transportation and Air Transportation have been expanded to include descriptions of the Motor Carrier Act of 1935 and the Civil Aeronautics Act of 1938.

With reference to business regulation, one can agree wholeheartedly with Professor Locklin that "Regulation of motor carriers has sometimes been accepted too uncritically," and with his contention that the particular regulatory scheme imposed upon motor carriers should be based upon their peculiar economic characteristics in relation to the public interest rather than on an assumed similarity of conditions to those in the railroad industry. He carefully distinguishes between the various types of regulation of highway transporters and explains the differences in the economic characteristics of railroads and motor carriers. However, he outlines the usual stereotyped objectives given for regulation of motor transport without evaluating the control devices selected for particular objectives as critically as would be desirable. He also fails to specify those requiring business regulation as well as vehicle regulation for the protection of the highway, promotion of public safety, and maximum utilization of the highway. An attempt is made to discuss the regulatory policies of the commission in administering the Motor Carrier Act of 1935, and the author succeeds admirably in shaping up for the student many of the major issues involved. In a general text it is hardly reasonable to expect a complete and critical treatment of administrative policy, since regulation by the Bureau of Motor Carriers is still in its preliminary stages and hundreds of cases would have to be analyzed.

Professor Locklin correctly places emphasis on the question of means of achieving economic coordination. He rejects "free competition" and granting railroads a transportation monopoly. He favors reliance upon regulation to prevent railroads which engage in non-rail operations from blocking economic development of other agencies or to restrain competing agencies from overreaching themselves in invading fields where other forms are superior. His emphasis on the essentials of a national transport policy for the achievement of coordination through regulation is

suggestive, particularly the coupling of needed rationalization of the railroad industry with this program.

This text merits wide adoption and reference. The improvements made are in the right direction, although the arrangement might have been improved somewhat by treating the economic characteristics of all agencies in one section near the beginning. The work still has the defect common to all our so-called general transportation texts; it remains fundamentally a text on the economics of railroad transportation.

U. S. Department of Agriculture,
Washington, D. C.

JAMES C. NELSON

Business Enterprise in the American Revolutionary Era. By Robert A. East. New York: Columbia University Press, 1938. Pp. 387. \$4.25.

The American Revolutionary era is 1775-1792. After 17 pages on the late colonial business scene, nine chapters, some 220 pages, are concerned with 1775-1782, "Years of Chance," and only 80-some with "Years of Consolidation and Expansion, 1783-1792." The former period is divided into chapters devoted to the business activities of a particular group, or in a specific area, or under special circumstances; there are also two chapters on the question of business freedom and the economic consequences of the war. The latter period is considered in two general chapters, supplemented by one on banks and another on "turnpike, canal, and bridge construction, manufacturing, and land speculation." Business enterprise, then, means, almost exclusively, commerce—buying and selling; business methods are not considered, only the persons, firms, ports, regions, commodities, and financial results. Paragraphs are packed with such facts, but the author has an easy style which keeps this mass moving along without jamming. A paragraph or two of analysis at the end of each chapter is of assistance to the reader.

Dr. East's main thesis is that the Revolution was largely a stimulus to American business; he believes that it is "questionable to what extent the war had injured the old colonial moneyed class" and thinks that the evil effects of depreciated currency have

been greatly exaggerated. He quotes Charles Biddle, a merchant-captain: "I have heard of a great many people losing by the Continental money but knew of but few." He himself "never lost thereby but on a single keg of rum." Dr. East brings together material which emphasizes the fashion in which during the Revolution public duty and private interest clashed in the lives of merchant-politician-contractors. He demonstrates the aggressiveness of the business interests, declaring, in reference to the Hamiltonian "counter-revolution," that "political disturbances in the 'eighties were as much a result of the demands for a new era on the part of political nationalists, supported by the forward-looking business element, as of old-fashioned threats by agrarians and debtors."

No author could arrange such a body of material so as to satisfy every particular interest. Three pages are devoted to the Pacific trade, but only some three lines to the bare "prospects" of commerce with India (p. 255); the Derby voyages are not mentioned. In contrast to space devoted to the unsuccessful New York and Beverly attempts at textile factories, the pioneer mill at Pawtucket receives only two lines and a fraction in text and foot-note (p. 313)—Slater's name is never mentioned in full.

The bibliography of unpublished primary sources not only indicates the appalling amount of labor involved and the skill with which the author has reduced the immense mass of material to usable form, but will also prove of considerable value to the student. It was a kindly thought to list "Printed Primary Sources" under person or institution wherever possible, rather than by author or editor; a similar arrangement, particularly of periodical articles, in the other sections as well would eventually prove of real service. It is hard to see, too, why biographical material should be split up between two sections.

Only once did the index fail me—and that when I, moved by the frequent mention of Levy, Lopez, Gratz, Seixas, *et al.*, hopefully but quite unfairly looked for a general reference after "Jennings, William" and before "Joint stock"; I made no attempt to find a substitute in "Non-Aryan"!

This volume is obviously indispensable to any library of Amer-

ican, economic, or business history, to which last field it is a particularly important addition.

Vassar College

KENNETH WIGGINS PORTER

Research and Statistical Methodology: Book Reviews, 1933-1938. By Oscar Krisen Buros, Editor. New Brunswick: Rutgers University Press, 1938. Pp. vi, 100. \$1.25.

This book contains excerpts from 608 reviews of books written in the English language on methodology in the physical and social sciences, and in statistics. These reviews are arranged alphabetically, according to author of book. The volume also contains a classified index to books, an index of titles, and an index of names of authors.

The excerpts are intended to be largely the critical portions of reviews so that the reader can get a consensus of the opinions of "authorities" concerning a book and can learn wherein it is strong and wherein weak. A very rough idea of the relative importance of the different books may be had by noticing the amount of space devoted to each. Thus, R. A. Fisher's *Statistical Methods for Research Workers* takes up four columns, Yule and Kendall's *Introduction to the Theory of Statistics* occupies three columns, while only one column is devoted to such an outstanding American text as Mills' *Statistical Methods*. Of course, this is far from conclusive evidence as to the relative merits of a book. For instance, in one excerpt, J. Neyman says that Yule and Kendall "is the best book on statistics ever written"; but Fisher receives more space since so much of his methodology is either original or has been greatly developed and extended by him.

One use to which the book may be put is to aid the teacher in selecting a textbook. The classified index lists such books as very elementary, elementary, intermediate, and advanced.

The volume owes its publication, however, to the author's belief that there is a lag between the time that a statistical (or other) method is discovered by research workers in one field and the time of its adoption in other fields and its subsequent incorporation in textbooks of those fields. For instance, you may have listened to psychological statisticians ardently discuss

"factor analysis," and may have wondered what factor analysis is, whether the method be adapted to analyzing economic problems, and where the method is described best. The classified index refers one to Holzinger's *Student Manual of Factor Analysis*.

In general, the space allotted to different books has been judicious, and the excerpts chosen have been well selected. However, although reviews are quoted from 130 American and foreign learned journals, the reviewer did not notice any from *The Southern Economic Journal*. Its chief shortcomings are its omissions. For instance, there is no reference to Thurston's *The Vectors of Mind*, probably the most important work in the field of factor analysis. Some very important 1938 books, such as Henry Schultz's *The Theory and Measurement of Demand* are not listed, perhaps because they have not yet been reviewed, although a number of books are listed without any reference to book reviews. There are only three references on correlation. Although not many books are written exclusively on correlation, the subject is treated in practically all texts on statistical method. It would be valuable to know which texts have particularly excellent, or comprehensive, or distinctive treatments of that subject and others.

The volume should prove very useful to research workers and teachers of statistics, and it is to be hoped that the demand will warrant its annual publication.

University of North Carolina

DUDLEY J. COWDEN

Farm Organization and Management. By G. W. Forster. New York: Prentice-Hall, 1938. Pp. xvi, 432. \$3.00.

Professor Forster's text, *Farm Organization and Management*, is the sort of book that a great many teachers of the subject have themselves wanted to write for a long time. This fact is not surprising when we consider that the author has for 15 years taught the subject to both undergraduate and graduate students and that his experience includes practical farming in the United States and in Canada, and opportunity for first-hand study of agriculture in continental Europe.

Professor Forster's book not only satisfies the need for a new text but to a remarkable degree achieves its purpose—"to integrate general economic principles, as they apply to farm management,

with sound farm practices"—a welcomed departure from the usual over-emphasis upon one or the other aspect of the subject.

After discussing briefly the nature and characteristics of the modern farm (Chap. I) Professor Forster reviews the various concepts of farm organization and management, orients and defines his subject (Chap. II) and traces its development in this country and in Europe (Chap. III). Both by word and by example, the author emphasizes the dual nature of his subject and makes clear the distinction between farm *organization* on the one hand and farm *management* on the other. As a matter of fact, while Part I and Part II are not evident in the Contents, the chapters are so arranged that "The Problems of Farm Organization" (Chap. IV) are rather adequately disposed of before any effort is made to broach the subject of "The Economics of Farm Practices" (Chaps. XIII & XIV). The intervening chapters deal principally with what Professor Forster describes as the first of "two main lines of approach" to the farmer's problem of getting the maximum net returns out of the resources available to him, namely, that which has to do with the enterprises which are included in the system of farming, dealing with both the kinds and the relative amounts of various enterprises to be included. The author's methods of evaluating farm enterprises and farm practices deserve special commendation and approval.

The second "main line of approach" deals with the efficiency with which individual enterprises are conducted, and it is with a discussion of this topic that Professor Forster introduces the subject of "Management." This is followed by short but succinct chapters dealing with the farm layout, size of farm, and with selection and acquisition of the farm and of farm implements and machinery. A chapter entitled "The Differential Nature of Management" (Chap. XIX) precedes a discussion of the management of labor and of working capital and a further chapter which reviews some of the new forms of management in agriculture. The remaining chapters are devoted to certain aids to management, rental contracts, and farm credit.

One might wish that Professor Forster had included at least an introductory chapter on record keeping and that the chapter on "Credit for Farm Operation" (Chap. XXV) were a little more

complete or up-to-date. For example, no mention is made in this chapter of the feed and seed loans which constitute an important source of production credit nor of the rehabilitation loans which represent an interesting and significant recent development. There is so much in this new text, however, which commends it that this reviewer is not disposed to be critical of these omissions. The book is certain to meet with widespread acceptance and approval.

Clemson Agricultural College

G. H. AULL

STATE NEWS

ALABAMA

Interest in Alabama has been centered largely upon the change in administration. Immediately after his victory in the primaries Governor-Elect Dixon gathered a group of experts and leaders for a careful study of the problems of the state and the formulation of a program for his administration. Immediately after his inauguration in January he began to take steps to put his program into operation. The regular quadrennial session of the state legislature is at present considering and formulating legislation to cover the various points in the program. A number of bills have been passed and approved by the governor but the major part of the legislation lies in the future. To date the administration does not seem to have encountered serious opposition.

Reorganization of government occupies a very important place in the general program. It is generally understood that both the consolidation of agencies into general divisions of state government and the centralization of administrative control over the divisions are included. Many of the proposed changes are of such fundamental character that constitutional amendments may be necessary before final legislation can be enacted. There has, however, been a substitution of a one man administrator for a commission in the case of several departments, for example the tax commission and the highway commission. The legislature is busy considering the various possibilities and undoubtedly will submit to the vote of the people a number of proposed constitutional amendments.

The governor has also promised a maximum efficiency and economy in the operation of the government. He is committed to a policy of eliminating unnecessary employees and has already ordered the discharge of persons employed during the last few months of the preceding administration. In general, however, he has not proceeded with the wholesale policy of replacing

department heads and those in responsible positions. As a part of the program to attain greater efficiency of operation he proposes to place state employees on a civil service or merit system. Considerable debate seems to be developing as to exactly which jobs should be included and as to how merit ratings should be determined, but the prospects of the enactment of some type of state civil service law seems at present good.

During his campaign the governor promised an eight month school term for the state. At present the funds available for school purposes are insufficient for carrying on such a term at least for the current year. At the same time the income tax collections have been sufficient to create a very considerable surplus in the income tax fund. The income tax is based on a constitutional amendment which provided that the proceeds of the income tax must be used in liquidating certain debts of the state, mainly those incurred in refunding the outstanding warrants and floating debt of the state. During the lean years of the state administration considerable sums were "borrowed" from school funds for the purpose of maintaining the so called essential functions of the government. It is now proposed that the Supreme Court be asked to render an advisory opinion as to whether or not the surplus in the income tax fund can be used to repay this debt to the school funds. If a favorable decision is given sufficient funds will be available to provide the eight month term.

The sales tax which would have expired October 1, 1939 has been reenacted with the elimination of the exemptions which were included in the former act. The new act repeals the old and is to take effect April 1, 1939.

Another administration measure provides for improvement in the machinery for assessing property and for equalization. These proposals have met considerable opposition and it seems rather doubtful that any fundamental changes will be made. Another matter which has received some attention is the passage of laws which will make federal employees and agencies subject to state taxes in case the federal congress passes laws permitting such taxation. Another problem which seems to be coming to the front is the problem of providing additional revenue for the municipalities of the state. As indicated above, comparatively

little formal legislation has been enacted into law but proposals for fundamental changes are receiving more serious attention than has been the case for many years.

Alabama College, beginning with the college year 1939-1940, will discontinue its two-year course in Secretarial Science. After that time the curriculum will be entirely on the basis of a four-year course leading to a B.S degree.

University of Alabama

H. H. CHAPMAN

FLORIDA

The Fourth Annual Economic Conference of Rollins College was held January 26-28, 1939. Cooperating in this year's session was the Winter Park Property Owners' Association, a local association formed to study the revenue and expenditure matters of the local and the state governments. The topics discussed were:

- "Transportation Problems," Dr. T. C. Bigham, University of Florida.
- "The Railroad Problem," Colonel W. J. Wilgus, Consulting Engineer.
- "The Transportation Situation," Mr. D. B. Robertson, President of Locomotive Firemen and Engineers.
- "Postalized Transportation," Mr. John A. Hastings, State Senator in New York.
- "Industrial and Economic Conditions in England," Mr. Robert Wilberforce, Director British Library of Information.
- "Favorable Florida Laws," Mr. Robert Pennington, Manufacturer's Trust Company, New York.
- "Federal Estate and Inheritance Taxes," Mr. Eldridge Hart, Attorney.
- "City Financial Affairs," Mr. Harvey Chase, C.P.A.
- "Municipal Assessments and Valuation," Mr. John C. Donehoo, Tax Consultant.
- "Handling Labor Disputes in a Democracy," Dr. John R. Stedman, U. S. Department of Labor.
- "The Work of the International Labor Organization," Dr. W. L. Taylor, Oregon College.

"Unemployment Insurance and Florida's Participation in This Phase of the Social Security Program," Mr. Royal Mattice, Florida State College for Women.

A problem of major significance to the Florida citrus industry has been engendered in the low prices prevailing for a bumper citrus crop. Florida interests have been, in past years, unable to effect a marketing agreement under the A.A.A. Florida citrus has been marketed without the prorate agreements which prevailed in the marketing of citrus from other producing areas. The situation was deemed to be so unsatisfactory that the State Commissioner of Agriculture, under authority enacted by the 1935 Legislature, declared a "state of emergency" and fixed the minimum price for grape-fruit for cannery use at 32¢ per box. Texas interests, likewise affected by low prices, placed a similar pegged price on grape-fruit.

Shortly after this event, the Florida growers voted on a marketing agreement to be administered by the A.A.A. and approved it by a favorable vote of 96 per cent of the growers voting. The agreement, however, cannot become effective until approved by 50 per cent of the handlers of fruit shipped from Florida. The proposal is, at this writing, before them for consideration. The program provides for regulation of shipments of Florida citrus, the industry to be empowered to keep low grade and small size fruit off the market.

University of Florida

ROLAND B. EUTSLER

GEORGIA

The problems before the regular biennial session of the legislature, which convened immediately after the first of the year, are currently attracting the attention of all those interested in economic and social conditions in Georgia. The approach of the present financial difficulties and some of the contributing factors have been mentioned previously in these pages. Two years ago the incoming administration, pledged to a program of vastly expanded governmental services and protective measures, inaugurated state-wide unemployment insurance, public assistance, and public health systems, and provided for free common school text books, a state-wide seven months school term, a highway

patrol system, expanded eleemosynary facilities, and partial relief from property taxes for home owners.

As a result of the expansion, the total state budget was greatly enlarged, county budgets were increased by the necessity of providing a part of the costs of public assistance, while both state and county revenues were decreased by the property tax exemptions. In order to meet the situation some of the existing levies were increased and additional taxes imposed, including liquor taxes, a truck and bus tax, a chain-store tax, and an intangibles tax, but the revenues derived have proved inadequate. While those agencies relying on ear-marked revenues do not suffer unduly (and this to a certain extent includes the public schools), those supported by the general fund are operating on about 50 per cent of their appropriations.

With the present governmental program facing serious difficulties, a strong movement against new taxes or any increase in existing taxes is apparent. The administration, while urging the continuation of its program, has been slow to propose any adequate source of revenue but has belatedly come forward with the suggestion of either a 3 per cent retail sales tax or a 1 per cent gross income tax on incomes over \$100.00 per month (with a few exceptions). Many of those who profess sympathy with the objectives of the program insist that administrative economy rather than increased revenue is the proper solution. Accordingly, a number of investigations have been initiated but have produced meagre results as yet. In the meantime a loan of \$2,000,000.00 has been secured in order to bring the payment of teachers' salaries up to date. Although it is possible that receipts during the balance of the year will permit repayment of this loan, the major problem of revenue is as yet unsolved. Thus, at the time of writing, it is possible to report nothing tangible to mark more than a month of legislative effort.

Despite the rather dismal picture of state finances, the current economic outlook for Georgia is not entirely dark. Numerous indicators, including building permits, reemployment, retail sales, bank clearings, and others, point to rapidly improving business conditions in the state. Improvement seems to be equal to, if not greater than, that in the southeastern section as a whole as

set out in the last quarterly report of the Federal Reserve Bank of Atlanta. In addition, the widespread critical discussion to which economic conditions in the state are being currently subjected gives grounds for a somewhat hopeful view of the future. The Citizens' Fact Finding Movement, discussed in these pages some months ago, has completed the first phase of its work—the compilation and wide dissemination of reliable factual material bearing upon the economic and social life of the state. The movement now enters its second phase—the promulgation of proposed solutions of the state's problems and the promotion of discussion of these proposals by local groups throughout the state. To this may be added the public forum movement which stimulates discussion of similar problems, the work of the State Engineering Experiment Station which investigates the practicability of particular industrial developments, and the Institute of Citizenship, sponsored by Emory University, Agnes Scott College, and the Georgia School of Technology, which this year is focusing discussion on the problems of industrial development in the state and has marshalled an impressive array of industrialists, educators, journalists, and public officials as discussion leaders. Such activities, it is to be hoped, will contribute to the general awareness of the state's problems and will indicate the directions in which solutions are to be sought.

Emory University

J. EDWARD HEDGES

KENTUCKY

The 1938 County Debt Act, in addition to providing procedure for refunding old issues and for floating new issues of bonds, contains clauses requiring county officials to file semi-annual debt reports and quarterly financial statements with the State Department of Revenue. The department is now engaged in analyzing the first reports of county budgets, showing detailed maturity schedules for each bond issue, the condition of each sinking fund, and a schedule of floating indebtedness outstanding. The quarterly reports of county court clerks respecting the current budgetary condition are also being analyzed with a view to current supervisory action, designed to insure a budgetary balance at the end of the fiscal year.

The State Division of Personnel Efficiency recently completed examinations for enlargement of the Unemployment Compensation Commission staff to take care of benefit payments. For this purpose an outside chief examiner was brought into the state, and all preliminary planning and the examinations themselves were conducted in such manner as to bring forth no criticism. The administration of the commission's division set up for handling benefit payments has been so effective, largely as a result of the qualifying examinations and the handling of personnel matters generally, that it develops the office is overstaffed.

The staff work of the Kentucky Legislative Council has been reorganized under the leadership of Mr. J. E. Reeves, new research director. The staff is small, and is guided by (a) a desire to coordinate research in state and local government scattered throughout several agencies in the commonwealth; (b) a desire to coordinate state planning and research work looking toward immediate legislative changes; and (c) the idea of confining the work done directly by the research staff to fact finding on projects almost certain to be of significance, irrespective of the political complexion of the next general assembly.

There have been two recent instances in Kentucky of city-county cooperative effort which are of general interest. The health departments of the city of Lexington and Fayette County have been combined with the approval of the State Health Commissioner. The city has appropriated \$23,000, the county \$8,000, and the schools \$6,000 for carrying on public health work during the current year, and there is every indication that the merger will prove an effective one.

The city of Madisonville and Hopkins County jointly sponsored a WPA county hospital project, which has recently been completed. The county appropriated \$10,000, the city appropriated \$5,000, and a campaign for private contributions netted \$30,000. This \$45,000 constituted the sponsor's portion of the total cost of the project, which will be approximately \$120,000. The hospital is to be governed by a board of trustees appointed by the city and county authorities which, once appointed, will become autonomous and self-perpetuating. Operation will begin unencumbered by any debt, and the hospital is expected to produce all

necessary operating expenses. There is no provision for future assistance from any public source, except payment by the city or county for charity cases.

University of Kentucky

CECIL C. CARPENTER

LOUISIANA

J. B. Trant, dean of the College of Commerce of Louisiana State University, has appointed a radio committee. Under the direction of this committee, three series of radio programs are being effected. The chief series is concerned with business and economic problems relating to Louisiana. One series was devoted to the preparation of personal income tax returns, and a coming series will be given to further information on merchandising and on secretarial practice. This series will be given in the afternoons in order to give classes in secondary schools an opportunity to listen in.

The second session of the Louisiana Bankers' Conference was held at Louisiana State University, January 25-27. The papers, except one, presented at this conference, contained general information of a banking nature. The one exception gave subject matter of great importance to the state. The paper referred to was read by the Honorable H. H. White, President of White-Dunbar & Company, of New Orleans. The subject of the paper was the "security of Bonds of Subdivisions of the State of Louisiana." Mr. White contended that the subdivision bonds were sound. He classified these securities and discussed the characteristics of each group. In the first group he placed all the bonds that were issued under Act 46 of 1920. He reasoned that these bonds were sound because in every decision the courts have held in favor of the bondholders. In the second group he placed the Levee District bonds and pointed out that certain taxes were levied with a definite purpose of servicing them. The Louisiana State University bonds, the Charity Hospital bonds, and the State Board of Education bonds, according to Mr. White, are not exactly state bonds since they are issued by agents of the state. Certain taxes, however, are set aside for their amortization. The City of New Orleans bonds have been under the supervision of the Board of Liquidation of City Debt, a non-political board

organized in 1808. The board was recognized by the state constitution of 1890 and has remained non-political to the present time. The bonds issued under this board with such a long record of conservative action meet all the demands of safety.

Louisiana State University

S. A. CALDWELL

MISSISSIPPI

When ad valorem taxes fell due on January 31 this year, Mississippi's comprehensive homestead exemption law was in operation for the first time.

A tentative statement by George C. Scutt, Chief of the Tax Commission's Homestead Exemption Division, gives the following amounts from which home owners have been exempted, with the result that local governmental units will be reimbursed in equivalent amounts out of the state treasury: County-wide taxes, \$1,223,350; common school fund taxes, \$555,650; road district taxes, \$241,800; school district taxes, \$380,650; municipal separate school district taxes, \$540,150; total, \$2,941,600. In addition the removal of the state's six mill tax from homes accounts for approximately \$700,000.

A total of 149,727 homesteads are affected by the new legislation, which exempts such property from all ad valorem taxes up to an assessed valuation of \$5,000.00, except (1) taxes of town and city governments, (2) taxes for debt service, and (3) taxes for governmental-cost payments in excess of the millage rates authorized in state statutes. While statistics are not yet available on the ratio of exempt to non-exempt homestead taxes, officials state that well over 50 per cent of all ad valorem taxes on homes have been removed by the legislation.

To finance the reimbursement to local governments during the 1938-40 biennium, the legislature appropriated \$5,250,000.00. In view of a large surplus in the state treasury, the only new revenue measures provided to meet this expense consisted of increases in the existing tobacco and beer taxes.

While first reports indicate an increase of employment during the late fall months in the nation as a whole, Mississippi proved a notable exception. The Unemployment Compensation Commission's index of end-of-month employment dropped from 95.5

in September to 91.7 in October and 89.9 in November. This trend may be significant to students of the Wage-Hour law.

A four-year course in Public Administration is to be established at Mississippi State College in the School of Business and Industry, of which James V. Bowen is dean. Emphasis will be given to governmental organization and policy, taxation, public relations, and governmental accounting and auditing. In the Land Grant College Association, G. D. Humphrey, President of the College, has been a strong advocate of such courses throughout the nation.

Jackson, Mississippi

M. K. HORNE, JR.

NORTH CAROLINA

North Carolina employers have made contributions amounting to \$19,070,077 in the past three years on unemployment compensation. Interest amounts to \$284,989; payments amount to \$8,216,039, leaving a balance in the reserve fund at the end of 1938 of \$11,139,027.

The general assembly was convened in regular biennial session in January 1939. Legislative action affecting the 3 per cent sales tax, diversion of state highway funds, increased tuition at the University of North Carolina, and increased taxes on bottled drinks and liquor is anticipated. Proposals for a twelfth grade in the schools, increased teacher pay and a retirement system have apparently been ruled out because of the lack of funds. Passed was a law exempting from merit examination the approximately 500 employees of the State Employment Compensation Bureau who have held their positions for six months or more. Merit examinations for future employees and promotion of old employees are being conducted throughout the state in the several job classifications.

More than a million dollars worth of foodstuffs and farm products taken from national areas of glutted markets and overproduction was distributed in the state during 1938 by the Commodity Distribution Division of the State Board of Charities and Public Welfare. A total of 24,000,000 pounds of food was spread among needy families, school lunch rooms, and public institutions of the state.

Duke University

J. MAYNARD KEECH

SOUTH CAROLINA

The present general assembly is facing a most difficult fiscal problem. Last summer the South Carolina electorate voted to amend the State Constitution to remove from the Constitution a provision making mandatory the levy of a three mill tax on property for the support of public schools. Other revenue sources have recently evidenced declines in productivity. On the expenditure side, urgent requests for appropriation increases have come from many state agencies and institutions. In particular, the state social security program is making heavy demands for funds. It is generally believed that approximately \$6,000,000 additional revenue must be obtained if various demands are to be met with reasonable adequacy.

At this juncture it cannot be predicted just what solution will be effected by the legislature. The general sales tax, with a rate of 2 per cent, has been most generally discussed in Columbia and throughout the state. This is proposed as a substitute for, or supplement to, existing selective sales taxes which have been effective for several years. Some persons profess to see the necessity or advisability of the retention of a state levy on property. A committee composed in part of members of the legislature and in part of outstanding citizens has been named to study the problem and to make recommendations. Incidentally, the legislature has memorialized the Congress to assume an increased portion of the costs of social security.

The Women's and Professional Division of the Works Progress Administration is cooperating with the Department of Agricultural Economics of Clemson College in an extensive research program. Among the principal projects are: studies in property tax assessments and delinquencies; the assessed values and sale prices of farm real estate; a graphic summary of the state's population and resources; the probable effects of homestead tax exemption; a rural housing survey; and a statistical analysis of data available in the reports of various state departments. These studies are expected to provide basic data for needed reforms.

Furman University

A. G. GRIFFIN

TENNESSEE

Various economic indices show that the state has kept pace roughly with the trends throughout the nation. The rate of increase in electric power output has far exceeded that for the nation at large. Likewise, the percentage increase in total construction contracts in the state has been higher than that for the nation as a whole. New residential construction, however, has fallen behind the trend for the nation. Tax returns from the state reveal that federal taxes collected in the state in 1938 exceeded by more than \$800,000 the collections in 1937.

State tax collections showed improvement for the last half of 1938, especially the gasoline tax, the franchise tax, and the gross receipts tax. The cigarette tax was reduced from 4 cents per package to 3 cents with the proviso that if, during a designated period of time, it failed to yield a stated amount of revenue the rate would return to 4 cents.

Governor Prentice Cooper is sponsoring an economy program for state government. The administration's reorganization bill has been passed giving the governor considerable additional power. The act places the Personnel Department and the Purchasing Department directly under the governor's supervision. The former Department of Institutions and Welfare has been divided into two departments, one having charge of institutions and the other of public welfare. The new organization has resulted in a state government with ten departments headed by commissioners and five departments headed by directors responsible directly to the governor. Perhaps the provision which allows the governor to strike from the payroll any state employee not elected by the people and increase or decrease the salary of any state employee not so elected was the most criticized item in the bill. The governor has been faced with a current financial deficit carried over from the past administration and with his promise not to add new taxes he has been forced to place emphasis on economy.

Three constitutional amendments have been recommended by the administration. These amendments were passed in the last general assembly and came back this year. They are: (1) an increase in per diem compensation for legislators from \$4 to \$10; (2) a revision of the tax structure "by permitting more equitable

distribution of the tax burden, in that net incomes may then be taxed and personal property classified for tax purposes"; (3) an increase in the governor's term from 2 to 4 years.

The legalization and taxation of liquor in Tennessee appears to be a growing issue in this legislature although the governor has expressed himself against any proposals of this character.

While the state is finding it difficult to secure sufficient revenue for its present program there appear to be urgent needs for additional educational and welfare funds. The administration has budgeted a \$750,000 annual appropriation for the University of Tennessee, this figure being somewhat larger than the amount actually secured by the university during the past year.

Former Senator James P. Pope of Idaho has assumed his duties as a director of the Tennessee Valley Authority. The United States Supreme Court on Monday, January 30, 1939, dismissed a major suit by private utilities against the TVA. Following closely after this 5-2 decision, the Tennessee Electric Power Company and the TVA reached an agreement for the Authority and the municipalities being served to purchase the property of this company at a figure of \$78,600,000. When the purchase of this property is completed it will mean that Chattanooga and Nashville will be able to secure TVA power as well as a very large number of smaller cities in the middle and eastern part of the state. Knoxville has already secured, through purchase, the property of the Tennessee Public Service Company and is now operating its municipal distribution system. The Tennessee Public Service Company has also been able to dispose of its transportation properties in this city.

The Congressional Investigation Committee investigating the affairs of the TVA did not file their report with Congress on January 3, 1939, as had been contemplated. Instead there was a request for additional funds—\$25,000—which was granted, and according to present announcements, a report will be submitted to Congress on April 1, 1939, by this committee.

Tennessee Valley Authority

T. L. HOWARD

VIRGINIA

Governor Price has announced the reorganization and enlargement of the Budget Division of the state. Since 1919 the budget

system has been administered by a director who confined his activities to the administration of the fiscal affairs of the state. Under the new arrangement the Budget Division is to be reorganized and enlarged to include administration, research and records, and control. In announcing the new plan the Governor said the change "sets new standards and objectives for budget making not only for Virginia but for the other states of the United States and the Federal Government." The director of the new organization will be Dr. Roland Egger who until his appointment to this position was head of the Bureau of Public Administration at the University of Virginia. The new program will be financed in large part by an initial grant of \$45,000 by the Spellman Fund of New York.

The Governor has stated that the purpose of the reorganization was to strengthen the present budget-document and control functions of the division and "particularly to implement the system of executive allotments and control, and to make the budget-document itself as well as the budget bill more useful to the members of the General Assembly and to the taxpaying public in supervising the work of the state government."

An equally important part of the functioning of the reorganized budget office will be long-term fiscal and administrative planning. It is intended that the budget office take up where the Virginia State Planning Board and other state and regional planning agencies now leave off, to translate plans into terms of fiscal requirements and administrative organization, to negotiate and determine priorities and, "in general, to implement the orderly and systematic development of the State's natural and human resources by suggesting practical lines of action for the realization of needed projects."

In concluding his statement the Governor said, "if we can plan our development closely in accord with national policy we may—nation, states and localities working hand in hand—contribute significantly to the economic stability and growth which is the keystone of vigorous democracy and sound government, and materially reduce the area of opportunism and accident in the progress of our State and nation."

University of Virginia

GEORGE T. STARNES

PERSONNEL NOTES

J. Haden Alldredge of the TVA has been named by President Roosevelt to the Interstate Commerce Commission. Mr. Alldredge is a champion of the removal of freight rate differentials which have handicapped the economic development of the South.

Arthur Anderson was added to the staff of the faculty in business administration and economics of Florida Southern College to take the place of Dr. Close.

Karl E. Ashburn, formerly professor of economics and business administration at Texas Technological College, assumed his new duties as head of the Department of Commerce and Business Administration at Southwestern Louisiana Institute on February 1, 1939. Dr. Ashburn made a special study of the Texas Workmen's Compensation Insurance Act and its administration for Governor James V. Allred in the summer of 1938. His findings and recommendations were published in a 110-page report by the State of Texas and made available to the Texas legislature.

G. H. Aull, head of the Department of Agricultural Economics and Rural Sociology at Clemson College, and S. M. Derrick, professor of economics at the University of South Carolina, have been named by Governor Maybank as members of a committee authorized to study South Carolina's tax problems and to make recommendations to the legislature.

Willis N. Baer, Stetson University, has been promoted to associate professor of economics.

R. P. Brooks, dean of the School of Commerce of the University of Georgia, is this year's president of the American Association of Collegiate Schools of Business. Dean Brooks has recently published a brochure entitled "Georgia Faces a Financial Crisis."

Miss Lelah Brownfield of Alabama College has been elected to membership on the executive board of the Southern Business Education Association as the representative from Alabama.

Everett J. Burtt, Jr., on the instructional staff of Duke University

for the past semester, has been released to accept a position at the University of Maine.

William P. Carr, formerly an instructor at the University of Texas, has been appointed an assistant professor of accounting at Mississippi State College. For several years Mr. Carr has been in private business as a certified public accountant.

James E. Chace, assistant professor of economics and real estate, has returned to the University of Florida after a year's leave of absence during which he did graduate study at the University of Chicago.

Lawrence Dixon took charge of the Commerce Department of Louisiana Polytechnic Institute at the beginning of the 1938-39 session.

Elizabeth W. Donovan has been appointed instructor in economics for the current semester at the Woman's College of the University of North Carolina.

H. M. Douty resigned his assistant professorship at the Woman's College, University of North Carolina, in February to accept a position under Civil Service appointment as associate industrial economist in the Wage-Hour Division, United States Department of Labor.

Robert Downs has been added to the staff of the University of Miami and is giving courses in history, political science, and economics.

Miss Inez Frink has been added to the staff as part-time instructor in commerce at the Florida State College for Women.

John L. Fulmer, assistant agricultural economist, Clemson College, is on leave of absence at the University of Virginia.

Stuart W. Girriel has been added to the staff of the University of Miami as assistant professor of marketing and industry.

C. Addison Hickman, formerly an instructor at the University of Iowa, is now serving as instructor in business administration at Stetson University.

Paul M. Jones, assistant professor in the School of Business and Industry at Mississippi State College, will teach accounting at Greeley State Teachers College in Colorado during the summer session.

Russell C. Larcom, formerly with Massachusetts State College,

has been added to the Stetson University staff as professor of business administration.

John S. Neblett resigned as instructor in business administration at Stetson University to accept a position at the Florida Military Academy.

Earl Powers was appointed instructor in accounting at the University of Florida.

L. B. Raisty, of the School of Commerce of the University of Georgia, is director of an extensive Works Progress Administration project, the object of which is indicated by the title, "Rural Real Property Identification Survey."

Reginald Rushing has resigned his position as assistant professor of accounting at Mississippi State College.

Alfred G. Smith, formerly of Columbia University, is serving as instructor in economics at the University of South Carolina.

Glenn W. Sutton, of the School of Commerce of the University of Georgia, is regional director of an inquiry being conducted by the United States Bureau of Labor Statistics. The investigation is entitled "State, County and Municipal Employment Survey." All of the territory south of the Ohio and Potomac and east of the Mississippi is in Dr. Sutton's region.

George Tomlin of the University of South Carolina is on leave of absence doing graduate work at the University of Pennsylvania.

Ralph M. Van Metre, formerly of the University of Akron, has been appointed associate professor of economics and sociology in Centre College of Kentucky.

BOOKS RECEIVED

- France Overseas: *A Study of Modern Imperialism*. By Herbert Ingram Priestley. New York: Appleton-Century Co., 1938. Pp. ix, 463. \$5.00.
- Price Control in Facist Italy. By Henry S. Miller. New York: Columbia University Press, 1938. Pp. 146. \$2.00.
- Dynamic Theory of Wealth Distribution. By Montgomery D. Anderson. Gainesville: University of Florida Press, 1938. Pp. x, 243. \$3.00.
- Manual of Economics for Teachers and Students. By Ralph H. Hess and Boris G. Dressler. New York: Macmillan Co., 1938. Paper covers. Pp. 270. \$1.50.
- The Peopling of Virginia. By R. Bennett Bean. Boston: Chapman & Grimes, 1938. Pp. viii, 302. \$3.00.
- Twenty Years' Armistice: 1918-1938. By William Orton. New York: Farrar & Rinehart, 1938. Pp. xiv, 308. \$1.90.
- How to Avoid Financial Tangles. By Kenneth C. Masteller. Cambridge, Mass.: American Institute for Economic Research, 1938. Pp. 160. \$1.00.
- Offerings and Registrations in High-School Subjects. By Carl A. Jessen and Lester B. Herlihy. Washington: U. S. Department of the Interior, Office of Education, 1938. Pp. v, 96. Paper covers. 15 cents.
- Labor Legislation in Czechoslovakia. By Esther Bloss. New York: Columbia University Press, 1938. Pp. 210. \$3.00.
- Research and Statistical Methodology: Books and Reviews, 1933-1938. By Oscar Krisen Buros, Editor. New Brunswick, N. J.: Rutgers University Press, 1938. Pp. vi, 100. \$1.25.
- An Economic Program for American Democracy. By Seven Harvard and Tufts Economists: Richard V. Gilbert and Others. New York: Vanguard Press, 1938. Pp. 91. \$1.00.
- National Bank Failures and Non-Failures. By Horace Secrist. Bloomington, Ind.: Principia Press, 1938. Pp. xix, 309. \$4.50.
- Contemporary Monetary Theory. By Raymond J. Saulier. New York: Columbia University Press, 1938. Pp. 420. \$4.00.
- The Functions of the Executive. By Chester I. Barnard. Cambridge: Harvard University Press, 1938. Pp. xvi, 334. \$3.50.
- Rural Youth: Their Situation and Prospects. By Bruce L. Melvin and Elna N. Smith. Research Monograph XV, Division of Research, Works Progress Administration. Washington: U. S. Government Printing Office, 1938. Pp. xx, 167.
- Life Insurance. By John H. Magee. Chicago: Business Publications, 1939. Pp. xv, 729. \$4.00.
- Ground Under Our Feet: An Autobiography. By Richard T. Ely. New York: Macmillan Co., 1938. Pp. xi, 330. \$3.00.

- Public Employment Service in the United States.* By Raymond C. Atkinson and Others. Chicago: Public Administration Service, 1938. Pp. xiv, 482. \$3.75.
- Proceedings of the Twentieth Annual Meeting, Urbana, Illinois, April 21-23, 1938.* Secretary, American Association of Collegiate Schools of Business, University of Arkansas, Fayetteville, Arkansas. Pp. 155. Paper covers. \$1.25.
- Iron and Steel.* M. S. Tariff Commission Report No. 128, Second Series, 1938. Washington: Superintendent of Documents. Pp. xii, 527. 60 cents.
- Social Insurance Coordination: An Analysis of German and British Organization.* By C. A. Kulp. Washington: Committee on Social Security, Social Science Research Council, 1938. Pp. xiv, 333.
- America Begins Again: The Conquest of Waste in our Natural Resources.* By Katherine Glover. New York: Whittlesey House, McGraw-Hill Book Co., 1939. Pp. xv, 382. \$2.75.
- Economic Problems in a Changing World.* By Willard L. Thorp and Others. New York: Farrar & Rinehart, 1939. Pp. xviii, 820. \$3.75.
- Public Utility Taxation in Ohio.* By James Carlton Dockeray. Columbus: Ohio State University Press, 1938. Pp. xiii, 200. \$2.40.
- Cause and Control of the Business Cycle.* By E. C. Harwood. Cambridge, Mass.: American Institute for Economic Research, 1939. Pp. vii, 220. \$2.00.
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